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**Online Romantic Relationships Transitioning Offline: Impact of  
Intimacy and Relationship Uncertainty on Relational Characteristics**

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**by**

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# **Online Romantic Relationships Transitioning Offline: Impact of Intimacy and Relationship Uncertainty on Relational Characteristics**

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Guided by a conceptual framework regarding how relationships experience points of transition, this research explored individuals' perceptions of their online romantic relationship's transition from a casual to serious relationship in comparison to how individuals in face-to-face romantic relationships experience points of transition. Participants were asked to answer questions regarding their perceptions of relational characteristics during different points in their relational transition. Perceptions regarding intimacy, relationship uncertainty, partner interference, directness of communication, topic avoidance, turmoil, deception and met expectations were assessed. Additionally, individuals in both online and face-to-face relationships responded to questions regarding their relationship status, commitment, length, proximity and other demographic questions. Results indicated that individuals in online relationships perceive more intimacy and less uncertainty prior to a transition while perceiving less intimacy and more uncertainty after a transition than face-to-face relationships. Relationships uncertainty was associated with topic avoidance and turmoil in online romantic relationships. Further results and the relevance of perceptions of relational characteristics on online transitioning relationships are discussed.

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## **Chapter One: Introduction**

The ability to form and maintain personal relationships has historically been somewhat constrained due to factors such as geographic location, financial resources and social networks. With some exceptions, most people have typically formed or sustained relationships based on family ties, friends' referrals, occupational contacts, and chance encounters during day-to-day activities. The increase of Internet use in the past decade, however, may be changing the way people form and develop meaningful personal relationships

Although commissioned by an Internet dating site, a study in 2009 found that more than twice as many marriages occurred between people who met on an online dating site than met in bars, at clubs, and other social events combined (Chadwick Martin Bailey, 2010). This startling finding shows how mediated communication (CMC) is redefining how people engage in relationships of all types. Considering the pervasiveness of e-mail, social media, Internet chat programs, instant messaging, and Internet video and teleconferencing, it is apparent that CMC is common. The use of mediated communication has become a mainstream way of life, with those who do not use mediated communication dwindling in numbers (Trafimow & Finlay, 2005).

The popularity of mediated communication has increased dramatically in the U.S. in recent years, and research interests in this area have increased accordingly (Dainton & Aylor, 2002). The use of Internet has started to provide another context for people to make new friends, fall in love, and build stable, long-term relationships, similar to face-to-face interactions (Walther & Burgoon, 1992). Bonebrake (2002) states that with Internet use growing exponentially, the development of online romantic relationships may no longer be the exception but a common way to meet romantic partners. Despite some criticism regarding the quality of online relationships, research examining dating websites provide evidence that significant,



strong, and often long-term romantic relationships are emerging online (Lea & Spears, 1995). Recent research revealing the number of new subscribers to dating websites indicates that people may be starting to rely more on online methods to find romantic partners (Madden & Lenhart, 2006). Every week, more than 60,000 new subscribers join dating websites such as *Match.com* or *eHarmony.com* (Madden, 2006). Of the subscribers to online dating sites, 78% use them to seek a long-term relationship (Brym & Lenton, 2001). More interesting, the majority of the people who met their romantic partners online have reported being engaged or married within one year (Madden, 2006).

With the increase of personal relationships formed online, research has started to examine several aspects of mediated close relationships, including the type of relationship (e.g., friendships, romantic and social support), unique attributes of the relationships (e.g., self-disclosure, lack of non-verbal cues and asynchronous communication), and comparing it to offline relationships (e.g., maintenance and termination) (Tidwell & Walther, 2002; Underwood & Findlay, 2004; Walther & Parks, 2003). With the growing research examining mediated close relationships, it is surprising to note that very little focus on relationships at points of transition, particularly transitioning offline. This is particularly surprising since the goal of many online romantic relationships is to move offline (Ben-Ze'ev, 2004), and many do, in fact, transition offline where they continue to develop. As online romantic relationships become more prevalent and, in some cases, progress from an online to offline relationship, it becomes increasingly important for researchers to examine couples that make this transition.

As shall be seen, the literature on people's experiences in online transitioning relationships is quite limited despite the exponentially growing use of the Internet to form romantic relationships as well as the likelihood that online relationships will essentially need to

transition to an offline relationship for further relational development. There is a need for empirical evidence regarding the experiences, perceptions, and characteristics of online romantic relationships at a point of transition. This examination becomes more relevant if one considers that 17% of couples in the U.S. who got married in 2009 met online and had to navigate a transition in their relationship (Chadwick Martin Bailey, 2010). Practically, this study may help online relationships more effectively navigate transitions while also highlighting potential hindrances in making a smooth transition. Theoretically, this study is one of the first to date to apply the relational turbulence model to online technologies and to relationships that began using online technologies to initiate and escalate their relationship. More generally, this study hopes to gain a better understanding of effective transitions within this unique but growing population of online-initiated romantic relationships. Therefore, the purpose of this dissertation is to use Solomon and Knobloch's (2004) relational turbulence model to gain insight into online romantic relationship in transformative relational experiences. Aligning with the parameters of the model, the research will investigate how relational uncertainty, intimacy, deception, directness of communication, and met expectations, surface within issues that confront people in transitioning online romantic relationships.

## **Chapter Two: Mediated Relationships and Study Rationale**

Although scholars have examined many aspects of romantic relationships, relatively little is known about relationships formed in online settings. For the purpose of this research, an online romantic relationship is understood as an intimate and passionate connection between two single, consenting adults initiated over the Internet with the intent to eventually form a long-term relationship (Wildermuth, 2001a). Since the research is also interested in serious relationships, short-term relationships are not included in this research. In addition, online romantic relationships are limited here to those romantic relationships initiated on the Internet regardless of whether individuals in the relationship decide to meet face-to-face after an initial connection is formed online. In order to gain a better understanding of online dating and how it originated, I will begin with a brief history of online dating and how it is used. Next, in order to comprehend the type of people that use online dating sites, I will discuss the characteristics of online daters. Further, since the literature tends to show a negative perception of online relationships (e.g., Anderson, 2005; Bonebrake, 2002; Donn & Sherman, 2002; Lea & Spears, 1995), I will continue this investigation by summarizing the perceptions of online relationships found in the literature. Finally, a comparison of online and offline relationships is put forth.

### *Background and Usability of Online Dating*

Online dating sites emerged in the 1980s and are increasing in popularity (Whitty & Carr, 2006). In 2001, online dating was a \$40 million business and it was expected to have made \$600 million in 2008 (Epstein, 2007; Online Dating Magazine Center, 2008). While similar to newspaper personals, online dating sites allow users to be more in-depth and interactive. Users construct profiles that may contain pictures and information about themselves. The top three largest and best-known sites in 2007 were *eHarmony*, *Match*, and *Yahoo! Personals* (Epstein,

2007). How each site matches potential partners varies: some may allow users to pick their own matches while others set matches up for users based upon the result of compatibility tests.

Although online dating sites are popular, they are not the only way individuals are finding romance online. Other mediated communication, such as e-mail, instant messaging services, and online phone services allow individuals to find romantic partners. Social networking websites like *Facebook* and *Twitter* as well as online search engines, such as *Google*, make it easier for individuals to re-connect with people with whom they have lost touch. Searching for information about potential romantic partners online may also make it easier for individuals to access personal information about an individual prior to dating.

Online dating is popular for a variety of reasons: individuals find it easier to meet others with common interests, people do not need to elicit help from their social network to meet potential romantic partners, accessing sites to meet people is relatively easy given the growing accessibility of the Internet, people can meet potential partners via another channel beyond face-to-face communication, the ability to be anonymous and personal simultaneously, and individuals know other users are also looking for a relationship (Henry-Waring & Barraket, 2008). Further, easy access to the Internet, decreased stigma around online dating, and affordability of sites are encouraging the popularity of online dating (Ellison, Heino, & Gibbs, 2006).

According to Valkenburg and Peter (2007), “about 37% of single American Internet users who are looking for a romantic partner have used a dating web site” (p. 849). Another study found 56.2% of all Internet users had visited at least one online personal site (Lever, Grov, Royce, & Gillespie, 2008). A Pew research study estimated that out of 10 million single Internet users, 74% have used the Internet to try to find a partner (Rosen, Cheever, Cummings, & Felt,

2008). Among these numbers, most are college-educated and employed (Kornblum, 2004).

Among people over 35 years old, males were more likely than females to form online romantic relationships (Fallows, 2005). While different instruments were used to measure online dating site usage, one conclusion is apparent: online dating sites are frequently visited by many people.

Finding romance online is not just for younger daters. In 2005, individuals in the first half of their forties were the most active date-seekers online. Online daters in the second half of their forties, however, were more likely to seek more serious relationships (Valkenburg & Peter, 2007). In one study of 8,566 online daters seeking a romantic relationship, heterosexual men represented the highest number of users followed by heterosexual women (Lever et al., 2008). Further, older adults have been participating in online dating, and online romances can and often do develop into long-term relationships (Malta, 2007). In 2007, Valkenburg and Peter found men visited sites more than women and online daters surveyed reported age ranges 30-40 and 40-50 more frequently than younger or older ages. Sites also cater to a variety of lifestyles, such as religious affiliation (e.g., *J-Date.com*). Some websites also offer dating advertisements that are specific to gay, lesbian, bisexual, and transgender users (Gudelunas, 2005).

A common myth about online daters is that they are socially awkward or unable to find a date in an offline setting. To specifically examine whether online daters were more shy or socially awkward, Valkenburg and Peter (2007) tested two opposing points of view: those who have high dating anxiety will benefit more from online dating sites by compensating for deficits they have face-to-face versus those who already have low dating anxiety and high dating skills will just use the Internet as another place to meet people (i.e., rich-get-richer hypothesis). To test these hypotheses, 367 Dutch adult singles completed an online survey to measure their intentions-for-dating and frequency of visiting dating sites. Almost half of the sample had visited

an online dating site. Valkenburg and Peter's (2007) results supported the rich-get-richer hypothesis and indicated "online dating seems to be an activity particularly of individuals who are low in dating anxiety" (p. 851). There was no support for the proposition that people using online dating sites make up for deficiencies or socially awkward behavior offline. Further, regular Internet users are generally well educated, strong income earners relative to the broader population, and more highly concentrated in areas of professional employment (Brym & Lenton, 2001; Hardey, 2004).

Further, Barraket and Henry-Waring (2008) discovered online daters are usually motivated to join online dating sites for both social and individual factors. Interviews were conducted with 23 Australian individuals who have dated online and they were asked what prompted them to join an online dating site. Reasons for joining included: moving for work, needing to build new social networks, feeling isolated because of being a single parent, long work hours prohibiting meeting people face-to-face, recently experiencing being single, and not being in a social network with available partners (Barraket & Henry-Waring, 2008).

Another study using ethnographic interviews of 11 adults who had been actively dating in the past year revealed additional motivating factors (Yurchisin, Wachravesringkan, & McCabe, 2005). The online daters indicated having started dating online because of some type of triggering event such as a move to a new town or a breakup, a desire for personal growth, or a combination of the two (Yurchisin et al., 2005). Finally, individuals may join online dating sites to learn more about themselves through the development of a serious long-term romantic relationship (Yurchisin et al., 2005).

Individuals may also feel more liberated online (Whitty & Carr, 2006) or feel more at ease disclosing online. From a study of Australian online daters, Whitty and Carr (2006)

summarized motivations for participants using online dating sites. Motivations included an alternative to the bar scene, finding short-term relationships to hopefully build a long-term one, for fun, because they were shy, there were no other options, and online dating is convenient. Through analysis of field notes from profiles on multiple dating websites, blogs, and dating experiences and 17 interviews with online daters, another study reported that users have different objectives for joining online dating sites (Kambara, 2005); some may be seeking traditional relationships while others may be dating online for entertainment or casual dating.

An assessment across these studies suggests motivations fall into two categories: social and individual. Individual motivations seem to be prompted by an internal drive to use online dating. Individual reasons include: for fun or personal growth (Kambara, 2005; Yurchisin et al., 2005), shyness, convenience (Yurchisin et al., 2005), feeling more at ease or more liberated disclosing online (Whitty & Carr, 2006), wanting a short-term relationship that will hopefully build to long-term one (Kambara, 2005, Whitty & Carr, 2006; Yurchisin et al., 2005), or feeling isolated (Barraket & Henry-Waring, 2008). As opposed to individual motivations, social motivations seem to be spurred by something outside the individual. Social motivations include: to build a larger social network (Barraket & Henry-Waring, 2008), having a triggering event such as move to a new town or breakup (Barraket & Henry-Waring, 2008; Yurchisin et al., 2005), not being in a social network with available partners, long work hours (Barraket & Henry-Waring, 2008), and having no other options (Yurchisin et al., 2005). Taken together, these motivations reflect a variety of factors as to why individuals seek romantic partners online. Most motivations highlight a common trend: Life circumstances make online dating and relationships a more viable option than traditional methods.

One of main advantages of online communication is its capacity to overcome distance, time, and space to allow for the establishment of new networks and relationships (see Castells, 2001). In the context of personal relationship formation, some psychological studies (Levine, 2000; Wildermuth, 2001b) have suggested that relationships formed online challenge traditional relationship theory, because physical proximity is de-emphasized as a feature of significance in relational development. These studies, however, mainly focus on relationships that are maintained exclusively online. The few studies that have examined the development of online personal relationships leading to offline involvement (e.g., Baker, 2005; Brym & Lenton, 2001; Ellison et al., 2006; Hardey, 2004; Markey & Wells, 2002) indicate that physical proximity remains a significant consideration for people forming face-to-face relationships that are partly mediated by online technologies.

What is perhaps more significant is the extent to which mediated communication provides new sites of social interactivity in which users of the technologies meet people with whom they would otherwise not come in contact (Castells, 2001). In this sense, exceeding the bounds of proximity is not simply a matter of distance, but a matter of access to diverse networks.

### *Perceptions of Online Dating*

Throughout the research on online relationship, a theme has developed that assumes those relationships, especially romantic relationships, are perceived negatively by people not involved in online relationships. In the mid 1990's, Lea and Spears (1995) indicated the existence of a stigma attached to online relationships. Over ten years later, researchers continue to assume that people react negatively to online relationships despite a lack of empirical evidence supporting the assumption (Anderson, 2005; Bonebrake, 2002; Donn & Sherman, 2002).



Recent research is starting to suggest that people may perceive the Internet as a more effective way of finding a romantic partner than more traditional methods. For instance, when examining a national sample of Americans, Madden and Lenhart (2006) found that nearly 64% agreed that online dating helps people find a better match because individuals have access to a larger pool of potential dates. Also, studies found that, compared to women, men reported that they expressed themselves more easily on the Internet and felt less pressure to move the relationship forward, which is a role expected from them in more traditional relationships (Cooper & Sportolari, 1997; Underwood & Findlay, 2004). Thus, both partners in online romances feel relationship progression is more shared than traditional relationships (Underwood & Findlay, 2004). These studies suggest that online methods of finding a partner may be more effective in finding a good match than traditional methods.

In addition to the efficacy of online dating, another growing perception is that people are feeling more comfortable interacting with others online. Findings from a recent study suggest that people who use the Internet to meet others are more truthful in general in their interactions (Knox, Daniels, Sturdivant, & Zusman, 2001). When examining college students specifically, Knox and colleagues (2001) found almost half of the sample felt more comfortable meeting an individual online than in person. The growing research on online romantic relationships indicates that it may be providing another alternative to the traditional face-to-face courtship process.

In addition to an alternative means of courtship, the use of the Internet as a channel to develop a relationship may have some benefits over traditional means. For example, McKenna et al. (2002) reported that “greater expression of one’s true self on the Internet results in the rapid formation of close relationships” (p. 28). In their report of three consecutive studies, McKenna and colleagues (2002) indicated that participants did indeed form meaningful relationships

online. They suggest that this relationship formation is facilitated by the absence of “gating features” such as physical appearance. Purportedly, the lack of gating features allows people to feel free to get to know others that they might not have approached otherwise. Further, McKenna and colleagues (2002) report that friendships formed online were stable over time (at a two year follow-up) and were highly likely to transition into face-to-face relationships. The contingent factor in the success of these relationships was how intimacy developed in relation to individuals’ willingness to share their true selves online. These findings built upon the authors’ previous research (McKenna & Bargh, 2000) and were supported by an additional study (Bargh, McKenna, & Fitzsimons, 2002) which asserts that people are more likely to express their “true self” online and therefore develop higher perceptions of intimacy than in face-to-face interactions.

Although perceptions of intimacy may be higher in online relationships than face-to-face relationships, online dating is often perceived as rife with deception, a concern that may arise from the potential separation between the self-presented online and the actual embodied self. In the absence of physical contact between daters, characteristics of partners can easily be manipulated. For example, partners’ height and weight can be easily misrepresented, photographs manipulated, and status and income exaggerated in online dating. Epstein (2007) found people tended to lie about their ages on dating sites. Users also tend to lie about their appearance (Whitty, 2008; Whitty & Carr, 2006). In another study, participants reported that they were least accurate in information given to a potential partner about their photographs and the most accurate about their relationship information (Toma, Hancock & Ellison, 2008). In the same study, deception patterns suggested that online dating participants strategically balanced the deceptive opportunities presented by online dating profiles (e.g., the editability of profiles)

with the anticipation of future interactions. Indeed, recent surveys report that 86% of online daters believe that others misrepresent their physical appearance (Gibbs, Ellison, & Heino, 2006) and many identify deception as the biggest disadvantage of online dating (Brym & Lenton, 2001; Pew Report, 2006). Other less common misrepresentations include details about having children or living with a past romantic partner, weight, socioeconomic status (occupation, being employed, being a professional, income), interests (Whitty & Carr, 2006), personality, age, height, and their intentions for joining the site (looking just for sex, not a relationship) (Whitty, 2008).

Although other research (Whitty, 2008) has found that online daters may use deception and be strategic with how they present themselves or use the online environment as a means to experiment with their self-presentation, Whitty (2008) found that in order for an online-initiated relationship to continue offline successfully, online daters need to present themselves in a manner that is consistent with their everyday life. This finding emphasizes that if online partners are open and honest with one another, there is greater likelihood that intimacy may develop and lead to a more successful, long-term relationships. The development of intimacy in online relationships is an important finding as it pertains directly to this dissertation, and more importantly, how perceptions of intimacy change as relationships transition will be examined.

#### *Comparing Online and Offline Romantic Relationships*

Early research on CMC indicated that the lack of nonverbal cues in online communication makes CMC a less effective means of communication than face-to-face interactions, and thus leads people to believe that online relationships are impersonal (Walther, 1992; 1996). However, later research suggested that anonymity increased individuals' willingness to disclose more about themselves than they would in face-to-face interactions and

also increased individuals' perceptions in intimacy (McKenna, Green, & Gleason, 2002; Whitty & Gavin, 2001). In line with these findings, Merkle and Richardson (2000) discovered a key difference between the use of online dating to find potential dating partners versus meeting dating partners through friends or other social networks or clubs. They found that online dating relationships progressed first through self-disclosure and the discovery of similarities, followed by the initial face-to-face encounter. Individuals who met through social networks came together because of mutual physical chemistry, and then progressed to the discovery of mutual interests and self-disclosure. The implications of these findings are important to the current dissertation, as it shows that the formation of online and offline relationships may differ and how certain relational characteristics may be emphasized at different points of relational development.

Disclosing more information, however, does not guarantee that the information will be accurate because some people use the Internet as a means to describe themselves in a way that differs from reality, whether they are aware of the difference or not (Whitty, 2002). Although relationships developed in a mediated environment rely heavily on information disclosed during people's interactions, research has found that the development of a relationship still occurs (Walther, 1992). In fact, the hyperpersonal perspective, states that the Internet allows for communication that is more intimate and sociable than that found in offline interactions (Rabby & Walther, 2003; Walther, 1996). This perspective argues that in the absence of nonverbal cues, the editing capabilities of information communicated may help CMC users self-present themselves in certain manners, which research shows may help generate more intimate exchanges than those in face-to-face interactions (Tidwell & Walther, 2002). According to the perspective, people can overcome certain limitations of face-to-face communication in an online

environment where individuals can interact with relative anonymity and develop close relationships relatively quickly (Hian, Chuan, Trevor, & Detenber, 2004; Walther, 1996).

Another theoretical approach that examines affinity in online relationships is the social identity/deindividuation theory (SIDE). SIDE has been applied to explain interaction in computer-mediated groups (Lea & Spears, 1995). SIDE theory predicts that CMC users over-interpret information from group communication. When they find similarity and common norms, people tend to perceive a greater attraction to a group and its members. The SIDE model argues that users are careful to construct messages that coincide with the prevailing group norms, which creates a level of social desirability in the interaction. The receiver then takes these somewhat anonymous messages and interprets them in light of their favorable in-group evaluations. The final outcome of this interaction is that individuals form a somewhat unrealistic, positive impression of their relationship partner.

Taken together, both the hyperpersonal perspective and SIDE theory propose how online impressions are formed, especially when identities are somewhat anonymous. They both showcase how impressions formed in a somewhat anonymous online environment can help create intimacy in relationships. Research regarding online impressions suggests that the anonymity of online relationships may be important in reducing uncertainty and developing intimacy (Walther, Slovacek, & Tidwell, 2001). What is unclear, however, is if relationships begin in a particularly anonymous medium (e.g., the Internet) and thus form positive impressions, will the positive impressions continue if the relationship moves to a less anonymous medium (e.g., face-to-face interaction). Therefore, contemporary questions in CMC pertain more to the unique properties of this medium that enhance, diminish, or alter the dynamics of relationships.

Even given the research on SIDE and hyperpersonal model suggesting the medium influences impression formation, the impact of the initial medium through which people conduct a relationship has received some debate. Merkle and Richardson (2000) suggested that because the processes through which romantic relationships develop online may differ from the process of developing offline relationships, then the relationships themselves may have some inherent differences as well. For example, they suggest that online relationships are more fragile, given the abundance of other alternatives available. Others (e.g., Walther, 1994) have argued that although differences in mediated relationships exist initially, over time these differences dissipate. Whereas scholars are increasingly comparing CMC with face-to-face groups directly (e.g., Sassenberg, Boos, & Rabung, 2005; Walther, Loh, & Granka, 2005), attention is rarely paid to the effects of how changes (if any) in the primary medium can impact the relationship.

Some scholars are starting to conceptualize mixed-mode relationships, where people meet online, but then migrate their relationships to offline settings (Walther & Parks, 2003). The goal of online relationships is often to evolve in a way that leads to an offline relationship. This suggests that the Internet is widely perceived as an enhancement in some respects but as a limitation in others. As Ben-Ze'ev (2004) noted "online relationships cannot overcome the desire for physical closeness" (p. 54). Even sometimes despite initial intentions, the relationship is moved to include offline interactions, such that "the successful goal of an online romantic relationship is its termination" (p. 142). With the goal of many online relationships being to evolve into an offline relationship, the evolution process of these relationships then provides new opportunities for research development. With more and more couples meeting online and then transitioning offline, more research is needed to investigate the transition. Research needs to go beyond studying traditional types of relations. In fact, there seems to be little understanding of

romantic relationships that could be considered non-traditional, like romantic relationships initiated online as opposed to face-to-face. If research finds online-initiated relationships that move offline are inherently different than traditional face-to-face relationships, how researchers approach studying particular phenomena may need to be altered depending on the medium studied. If differences exist between online and offline relationships, it will impact how researchers theoretically assess relational trajectories and characteristics. Also, differences will influence practical implications for what researchers suggest to people starting a relationship online. Overall, a lack of knowledge about online romantic relationships can undermine our understanding and tolerance toward relationships that fall outside conventional parameters (Wood & Duck, 1995).

The focus of this study, then, is to examine relationships that are initiated and established online for at least one month prior to moving offline and compare the transition of these relationship to traditional relationship that were initiated and established offline (or face-to-face). For the rest of this study, relationships that are initiated and established online will be referred to as *online relationships*, and relationships initiated and established offline will be referred to as *offline or face-to-face relationships*. To help guide the discussion, the next section will discuss research on transitioning relationships, and, in particular, describe the relational turbulence model (Knobloch & Solomon, 2004), a theory which seeks to explain characteristics of relational transitions.

#### *Relational Turbulence Model*

The relational turbulence model (Solomon & Knobloch, 2004) focuses on relationship qualities that affect communication experiences during times of relational change, particularly when relationships transition from casual to serious dating. Thus, it is especially relevant to

individuals transitioning from an online to offline romantic relationship. In particular, transitions are often characterized as responses to change in which individuals encounter varying degrees of instability (Marineau, 2005). Because instability may be due in part to the complex nature of transitions (George, 1993), scholars emphasize that moments of transition share a reciprocal relationship with a social context, such that transitions are both embedded within and shaped by their social context (Tomlinson, 1996). Accordingly, transitions present the opportunity for change to identities, roles, relationships, behaviors, or defining one's self or one's relationship (Berger & Bradac, 1982; Knobloch & Solomon, 1999). In other words, evolving through a transition involves both individual change, as well as possible modifications to the relationship in which the transition is taking place.

The relational turbulence model provides an understanding of how progression in a romantic relationship, particularly progression from a casual to serious relationship, has the potential to elicit various communicative behaviors. In particular, the model suggests these changes are most evident when a couple progresses from a casual to serious relationship, such as the progression that will be studied in this dissertation. The changes that occur during the transition from casual to serious relationships bring forth more extreme emotional, cognitive, and communicative reactions to events (Solomon & Knobloch, 2001; 2004). Research supports this theorizing and has found that more extreme emotional experiences (Knobloch & Solomon, 2002b; Knobloch, Solomon, & Cruz, 2001), cognitive appraisals (Knobloch & Solomon, 2005), and communication behaviors (Afifi & Burgoon, 1998; Knobloch & Carpenter-Theune, 2004; Knobloch & Solomon, 2003; Theiss & Solomon, 2006) surface when individuals indicate heightened levels of uncertainty and goal interference. Thus, the theory points to relationship



qualities that may affect communication patterns when couples transition from casual to serious relationships.

In this dissertation, I utilize the relational turbulence model as a theoretical framework to gain insight into online romantic relationships in a transitional state. Aligning with the parameters of the model, this dissertation will investigate how relationship uncertainty, intimacy, topic avoidance, met expectations, directness of communication and deception surfaced within issues that confront individuals transitioning an online romantic relationship from a casual to serious relationship. To many online partners, a transition from a casual to serious relationship may occur when the partners move the relationship offline. Moreover, the relational turbulence model provides understanding to relational circumstances that may promote or undermine effective communication during transitions from casual to serious dating. To start the exploration, I will begin by briefly discussing relationship uncertainty and uncertainty reduction theory. Uncertainty will be discussed first as previous research and the current study have stated that uncertainty is an important relational quality in transitioning relationships.

*Relational uncertainty.* Initial conceptions of uncertainty referred to an individual's confidence in understanding and explaining behavior (Berger & Calabrese, 1975). As research in the area of uncertainty developed, scholars identified relational uncertainty as a specific type of uncertainty that involves an individual's confidence in their perceptions of relationship involvement (Knobloch & Solomon, 2002a). Moreover, researchers distinguished three specific sources of uncertainty: self, partner, and relationship uncertainty (Berger & Bradac, 1982; Knobloch & Solomon, 1999). *Self uncertainty* arises when individuals question their own involvement in the relationship, which may include evaluating their own goals in the relationship. *Partner uncertainty* includes the concerns individuals face about their own partner's

involvement in the relationship, which may include the goals or worth the partner has for the relationship. *Relationship uncertainty* encompasses more global questions regarding the relationship, such as the roles each partner plays within the relationship, reciprocity, cultural norms, and where partners believe the relationship will go in the future. Although questions about involvement in a close relationship can arise at any point throughout the trajectory of that relationship (Baxter, 1988), uncertainty may be particularly heightened during transitional moments.

Uncertainty reduction theory (URT; Berger & Calabrese, 1975) is a particularly appropriate perspective as it relates to computer-mediated relationships and complements the relational turbulence model. An important component of the relational turbulence model is how uncertainty affects and is affected by the transition of a relationship from casual to serious. URT posits that the major goal in relationship development is to increase the level of partner certainty. Partners engage in passive, active, or interactive strategies to reduce uncertainty. In a CMC setting, Joinson (2001) reported that chat-based CMC sparked more participant self-disclosure in a laboratory interaction than face-to-face communication. Ben-Ze'ev (2003) also reported that because emotional self-disclosure is more important to building intimacy than factual self-disclosure, online relationships often have a higher degree of intimacy and emotional self-disclosure than offline relationships. The nature of online relationships may promote tactics that reduce uncertainty resulting in increased self-disclosure (Tidwell & Walther, 2002). Thus, in the absence of sensory input available in face-to-face interactions, uncertainty reduction may be an important component to relationship development.

Uncertainty reduction is also driven by the possibility of future interaction. Walther (1994) reported that in CMC, anticipation of future interaction was a stronger predictor of

satisfactory relational communication than was channel selection (i.e., CMC vs. face-to-face). Recent research has supported Walther's (1994) findings. For example, Pauley and Emmers-Sommer (2007) found that in CMC relationships, anticipated future interactions were positively correlated with greater uncertainty reduction. In another study (Berger & Douglas, 1981), after participants viewed photographs of people they may meet, participants who were anticipating future interaction with the person in the photograph rated them as significantly more sociable than those not anticipating any contact. How the anticipation of future interaction is related to uncertainty reduction and the transitioning relationship will be discussed further below.

*Using the Relational Turbulence Model to Predict Communication during Transitions in Online and Offline Relationships*

According to the relational turbulence model, romantic partners encounter relational turbulence as a byproduct of fluctuating intimacy. Intimacy is frequently defined as a multifaceted concept that builds as the relationship develops over time. Sternberg (1986) broadly defined intimacy as people's perceptions of connectedness, closeness, and bondedness within a relationship. Moss and Schwebel's (1993) define intimacy as encompassing five components: commitment, affective intimacy, cognitive intimacy, physical intimacy, and mutuality. Several scholars have defined intimacy as an interpersonal process encompassing partner responsiveness and self-disclosure (e.g., Laurenceau, Feldman-Barrett, Pietromonaco, 1998; Reis & Shaver, 1988). Taken together, these varying definitions show intimacy characteristics of closeness in relationships.

Prior research has shown that increased intimacy in a relationship is generally associated with more open communication between partners because it reduces uncertainty (Berger & Calabrese, 1975) and discloses private information that builds trust (Altman & Taylor, 1973).

Intimacy has been found to be an important aspect in computer-mediated communication. Several studies indicate CMC environments are conducive to disclosing more information in a quantitatively and qualitatively different manner than face-to-face interaction: Individuals are more likely to disclose not only more personal information but also information that they otherwise might not in person (e.g., Baker, 2002; Biggs, 2000; Joinson, 1998). McKenna and Bargh (2002) indicated that the anonymity of the Internet may allow individuals to take greater risks in self-disclosure than they might in other settings, and they found that online relationships tend to develop intimacy and closeness more rapidly than offline relationships.

Additionally, research indicates that individuals tend to become more intimate with those whom they believe are similar in terms of values, interests, and beliefs (Bargh & McKenna, 2004; Merkle & Richardson, 2000; Walther, 1995). Initial beliefs of similarity can occur online by joining a chat room or bulletin board devoted to one's hobby, occupation, religion, political views, geographic region, or any other area of personal interest. Similarity can also be found in online dating sites based on similar interests (such as religious match-making sites). This is not to suggest that genuine similarity is present merely due to an individual's membership in an online group or match-making site; however, initial meeting in an online venue of shared interest can indicate initial, albeit superficial similarities (Bakardjieva, 2003; Hardey, 2004). Merkle and Richardson (2000) suggest that in-person relationships are often characterized by initial attraction based on physical characteristics but not necessarily similar values, interests, or beliefs. Conversely, people who develop online relationships often begin their attraction due to a perceived similarity (e.g., occupation, hobby, similar interest). This can lead to what Merkle and Richardson (2000) called "capricious discussion" (p. 189). Hence, the more individuals believe they might have in common with one another, the more likely they are to want to interact again

(Parks & Floyd, 1996). Capricious discussion has similarities to SIDE theory which states that when people find similarity and common norms, they tend to perceive a greater attraction.

Wright (2004) reported that many interview participants in an online support group stated that they felt more intimate with their online friends than members of their own family, even though they had not met their online friends face-to-face.

Although people might feel more intimate with people online faster than in face-to-face relationships, little is known about how this perception of intimacy transcends a transition from an online to an offline relationship. Very few studies have examined how online relationships have transitioned offline. As previously mentioned, Ramirez and Zhang (2007) found that non-romantic virtual partnerships who move offline report lower levels of intimacy after transitioning than strictly-online partners or face-to-face partners (Ramirez & Zhang, 2007). Interestingly, partners transitioning offline had higher intimacy perceptions prior to the transition than face-to-face partners yet lower intimacy perceptions after the transition than face-to-face partners. These findings support the hyperpersonal perspective that moving the relationship offline mitigates any gains in intimacy online partners make over offline partners. Consistent with the hyperpersonal perspective, higher levels of intimacy in online couples prior to shifting offline is likely a product of heightened expectations developed via CMC that may not be met once the relationship transitions offline. Therefore, intimacy levels in relationships that transitioned offline were lower after the transition than strictly offline relationships. Although the Ramirez and Zhang (2007) study did not examine romantic relationships, this dissertation hopes to extend their findings by examining intimacy in online relationships when they transition to a more serious relationship.

With the increasing number of romantic relationships that are initiated online, it is therefore important to investigate the connection between intimacy and uncertainty, especially

since research has shown an accelerated development of intimacy in online romantic relationships as compared with offline relationships (e.g., Ramirez & Zhang, 2007; Tidwell & Walther, 2002). It is important to further examine how the heightened intimacy perceptions online transcend a transition into a more serious relationship. Furthermore, it is important to apply the concepts of the relational turbulence model to the online setting to identify if the model can be extended to online romantic relationship development. Then, given that the relational turbulence model has indicated a negative relationship between intimacy and uncertainty reduction during times of transition (Solomon & Knobloch, 2004; Theiss & Solomon, 2008), I predict that in online-initiated romantic relationships there will be a negative association between intimacy and uncertainty. In comparison with face-to-face romantic relationships, I also posit that romantic relationships initiated online will have higher intimacy levels prior to the transition to a serious relationship than face-to-face relationships; but conversely, online romantic relationships will have lower intimacy levels than face-to-face relationships after the transition. Formally stated:

*H1: In online transitioning romantic relationships, there is a negative association between intimacy and relationship uncertainty prior to the transition.*

*H2: Prior to the transition from casually dating to a mutually committed relationship, individuals in online romantic relationships have higher intimacy levels than individuals in face-to-face relationships.*

*H3: After their transition from casually dating to a mutually committed relationship, individuals in online romantic relationships have lower levels of intimacy than individuals in face-to-face relationships.*

*Uncertainty*

Although uncertainty reduction theory generally suggests that uncertainty should decline as a relationship becomes more intimate (Berger & Calabrese, 1975), uncertainty may increase if couples are going through a transitional state. According to Ramirez and Zhang (2007), who paired together participants to perform tasks for their study, pairs who initially met online then transitioned offline had higher uncertainty after the transition than pairs who always interacted face-to-face. However, online couples perceived lower uncertainty than face-to-face couples directly prior to the transition. The finding that online couples perceive lower uncertainty than face-to-face couples matches the hyperpersonal perspective's tenet that an online environment is more conducive to building intimacy and lower uncertainty than face-to-face environments. Further, research has also shown that people in mediated relationships who anticipate future interactions actively work to reduce uncertainty more than people not anticipating future interactions (Pauley & Emmers-Sommer, 2007; Walther, 1994). This means that uncertainty will be lower for online couples prior to a transition than offline couples. Therefore, it is likely that online couples who expect to transition, such as transitioning to an offline relationship or moving from a more casual to a more serious relationship, will actively work to reduce their uncertainty prior to a transition.

Walther and Zhang's (2007) study found that, in line with the hyperpersonal perspective, the transition offline of non-romantic virtual partnerships mitigated any gains in relational characteristics that the virtual partners made over the face-to-face partnerships. Relating these findings to online couples, then, would mean that any positive gains in relational characteristics prior to the shift may be diminished after a couple makes a transition. The reduced levels of affinity produced by the introduction by an offline environment or a change from a casual to

serious relationship may increase uncertainty levels. A reason for the increases in uncertainty may be that partners do not meet expectations or are different from what was perceived online.

Adding to the notion that uncertainty may increase when individuals in online romantic relationships decide to make the relationship more serious, the relational turbulence model shows that uncertainty increases when partners find themselves in a period of transition between levels of involvement. Consider the transition from casual to serious dating emphasized in the development of the relational turbulence model. Dating partners can rely on scripts for first dates to guide their behavior (e.g., Honeycutt & Cantrill, 2001). When relationships have progressed beyond the initial phase (such as the initial interactions online), but lack a clear and mutual commitment, individuals may confront questions about what they want out of the relationship, how invested their partner is, and the nature of the relationship (Baxter & Bullis, 1986; Baxter, 1988). These questions about the relationship may increase partners' level of uncertainty when meeting a partner for the first time offline. In light of both the hyperpersonal perspective on online transitioning relationships and the relational turbulence model, the focus on uncertainty in people transitioning from a casual to serious relationship guide the following hypotheses to be posed:

*H4:* Prior to a transition from casually dating to a mutually committed relationship, individuals in online romantic relationships have lower levels of relationship uncertainty than individuals in face-to-face relationships.

*H5:* After their transition from casually dating to a mutually committed relationship, individuals in online romantic relationships have higher levels of relationship uncertainty than individuals in face-to-face relationships.



In addition to uncertainty increasing during times of transition, uncertainty is also associated with other factors of relational development. Consistent with the relational turbulence model, increases in uncertainty correspond with an array of emotional, cognitive, and communicative manifestations of turmoil in romantic relationships. Research has linked the experience of uncertainty with more negative emotion (e.g., Knobloch, Miller, & Carpenter, 2007; Planalp & Honeycutt, 1985) and increased jealousy (e.g., Afifi & Reichert, 1996; Theiss & Solomon, 2006). Research also demonstrates that uncertainty corresponds with increased partner interference (Solomon & Knobloch, 2004; Theiss, Knobloch, Checton, & Magsamen-Conrad, 2009), increased topic avoidance (Afifi & Burgoon, 1998; Knobloch & Carpenter-Theune, 2004), perceptions of increased turmoil in courtship (Knobloch, 2007) appraisals of irritations as more severe and relationally threatening (Solomon & Knobloch, 2004; Theiss & Solomon, 2006), and more indirect communication patterns (Knobloch, 2006; Theiss & Solomon, 2006). Taken together, this evidence suggests that uncertainty may intensify emotional, cognitive, and communicative reactions to relationship circumstances in online relationships as well.

Since it has been hypothesized that uncertainty will be higher in online relationships than face-to-face relationships, it is likely that transitioning online relationships will have more intensified emotional, cognitive, and communicative reactions seen in transitioning relationships. In light of the previous research on intensified reactions to increased uncertainty and to the extent that these findings generalize to online romantic relationships transitioning offline, I propose the following hypothesis:

*H6: After individuals in online romantic relationships transition, relationship uncertainty is positively associated with: a) partner interferences, b) indirect communication*

patterns, c) topic avoidance, and d) perceptions of increased turmoil in the relationship.

*H7:* The relationship between relationship uncertainty and a) partner interference, b) indirect communication patterns, c) topic avoidance, and d) perceptions of increased turmoil are moderated by relationship type such that the associations between relationship uncertainty and partner interference, indirect communication, topic avoidance, and turmoil are stronger for individuals who have transitioned in an online romantic relationship than individuals who have transitioned in a face-to-face relationship.

#### *Deception, Expectations and Transitioning Relationships*

Investigating the role of deception in transitioning romantic relationships is important, particularly given the well-documented association between deception and negative consequences to relationships (McCornack & Levine, 1990; Planalp & Honeycutt, 1985; Planalp, Rutherford, & Honeycutt, 1988). Most previous research on deception in relationships has focused on established relationships but few have focused on deception in relationship initiation (exceptions include Rowatt, Cunningham, & Druen, 1999; Tooke & Camire, 1991) or transitioning relationships. The research that has focused on deception in relationship initiation has found that deception is often utilized to initiate a date. Further, online research has shown people oftentimes deceive in online dating (Epstein, 2007; Gibbs, Ellison, & Heino, 2006; Whitty, 2008; Whitty & Carr, 2006), where deception may be easier to conceal because of the limited verbal and nonverbal cues. In fact, the ability for the deception to go undiscovered (or undisclosed) for quite some time seems far greater in online relationships. Therefore, one promising avenue through which to better understand online transitioning relationships is to

investigate the use of deception online and its possible discovery when couples transition to a more serious relationship. I will begin by reviewing self-presentational and deception strategy motivations to initiate a relationship.

As romantic relationships are formed, people exchange personal information and engage in a variety of strategies that are designed to attract a partner (Buss, 1988). Although deceptive communication has been shown to be used during the maintenance phase (Boon & McLeod, 2001) and dissolution phase of a relationship (Miller, Mongeau, & Sleight, 1986), it has also been shown to be used to initiate or escalate a relationship offline (Rowatt et al., 1999; Tooke & Camire, 1991) and online (Epstein, 2007; Gibbs et al., 2006; Whitty & Carr, 2006; Whitty, 2008). Relational deception is commonly defined as a case in which a person produces a message with the intent to mislead a relational partner about a matter of some consequences to the partner or relationship (Burgoon & Buller, 1994; McCornack & Levine, 1990). It is important to note that deception may not always be an extremely glaring act to mislead a partner. Kagle (1998) found that although deception can be used for malicious intentions, it is sometimes utilized to establish personal boundaries, manage relationships, and “fib” to a partner.

Despite the severity of deception, presenting oneself as desirable to a potential mate is crucial (Metts, 1989) and often involves the use of deception. Buss and Schmitt (1993) suggest that to be successful in attracting a partner, a person must provide signals that she or he will deliver the benefits desired by a prospective mate, even if the person cannot provide such benefits. In fact, research has found that both men and women reported using deception on an attractive member of the opposite sex in order to initiate a date (Rowatt et al., 1999) and another study found that more than 60% of participants reported using deception to initiate a date (Tooke & Camire, 1991).

What is unclear, however, is that if deception is utilized so frequently to initiate a relationship, what happens if that deception is discovered. This question is particularly important for online-initiated relationships where deception may be easier to conceal because of the limited verbal and nonverbal cues. As previously explained, online dating is often perceived as rife with deception, as partners can easily manipulate characteristics to enhance their self-presentation. Hanvey's (2010) qualitative dissertation examining 6 people's experience with moving an online relationship offline found that all 6 participants experienced some form of deception. Although deception varied in types and extent among the participants, deception turned out to be the most common collective experiences. For the participants in the study, most were deceived during their online correspondence; however, the disclosure or discovery of deception was not until after the couple had moved their relationship offline. Although Hanvey's study only interviewed 6 participants, all were deceived at some level.

Although the social norms regarding deception in online dating environments are still being developed, perceptions of others engaging in deception have the effect of causing users to exaggerate in their own profiles to the extent that they think others in the system are exaggerating, so that they are not overlooked in comparison to them (Fiore & Donath, 2004). Even though previous research has indicated that deception is common in online dating (Epstein, 2007; Brym & Lenton, 2001; Gibbs, Ellison, & Heino, 2006; Whitty & Carr, 2006; Whitty, 2008), it is also seen as "main perceived disadvantage of online dating" (Brym & Lenton, 2001, p. 3) due to the expectation of meeting face-to-face and creating an offline relationship. Therefore, the question arises about how people will handle the deception once it is discovered, especially if the deception is discovered during a transitional period in the relationship (e.g., when online couples move offline, when moving from a casual to a serious relationship).

### *Deception and Relationship Type*

The successful use of deception in the beginning of courtship may have consequences for the potential future relationship if the deception is discovered, especially in a transitioning relationship. The potential for the relationship to continue may even be compromised, especially if the deception means that partner expectations are not met. As stated in the hyperpersonal perspective, individuals will overattribute impressions of others online based on limited cues (Walther, 1996). CMC users can construct idealized expectations of their online partners. Others could potentially form levels of affinity that would be unexpected in parallel offline relationships because of heightened impression formation online. In an experiment of impression formation, participants in online contexts did not have the same breadth or comprehensiveness of impressions (they rated their partners on fewer characteristics) than their face-to-face counterparts; yet for those that they did assess, the ratings were significantly more intense (Hancock & Dunham, 2001). This supports the hyperpersonal perspective that impressions via CMC can be exaggerated or more intense.

Because online partners form idealized impressions of their partners (Walther, 1996), idealizations may be formed based on deceptive information. As stated, deception is common in online dating environments and individuals may form idealized impressions of their partners based on deceptive information. Although it may seem a person would try to conceal their deception, the discovery of the deception may be likely since people tend to use a high degree of uncertainty reduction strategies in initial interactions to help reduce their uncertainty about the relationship. As people engage in uncertainty reduction strategies, the discovery of deception is possible.

Furthermore, if deceptive strategies were used while the relationship was online, when the relationship moves offline individuals may feel the desire to disclose the deception. This idea follows previous research that people want their romantic partners to understand them and accept them for who they are (Reis & Shaver, 1988). It is possible that deceptive strategies used to initiate and maintain a relationship online might be discovered or even disclosed once the relationship moves offline. Detection or disclosure of a deception during a transitional state has been shown to increase uncertainty in offline romantic relationships (Planalp & Honeycutt, 1985; Planalp et al., 1988).

Since the use of deception online to establish a relationship is common (Epstein, 2007; Gibbs, Ellison, & Heino, 2006; Whitty, 2008; Whitty & Carr, 2006) and, as just stated, the discovery of deception during a relational transition increases uncertainty (Planalp & Honeycutt, 1985; Planalp et al., 1988), it is likely that individuals transitioning in an online relationship who discover deception will report greater uncertainty than individuals who do not discover deception. As such, deception may explain the differences proposed between relationship type and uncertainty. Since, according to the hyperpersonal perspective, individuals in online relationships may form idealized notions based on deceptive information, uncertainty about the relationship may greatly increase if idealized notions of the partner are found to be untrue. In relation to the hyperpersonal perspective, offline relationships do not form as many unrealistic impressions because face-to-face interaction has more cues. Thus, deception may explain differences between online and offline transitioning relationships and uncertainty. If, as previous research suggests, the discovery of deception increases uncertainty in established relationships (Planalp & Honeycutt, 1985) and has negative consequences for relationships (McCornack &

Levine, 1990; Planalp & Honeycutt, 1985; Planalp et al., 1988), the following hypotheses are proposed:

*H8*: After the transition to a mutually committed relationship, individuals in online relationships discover a greater amount of deception than individuals in face-to-face transitioning relationships.

*H9*: Individuals in online relationships discover more severe deception than individuals in face-to-face transitioning relationships.

*H10*: Degree of deception (i.e., a combination of severity and amount) discovered is positively related to relationship uncertainty.

*H11*: Degree of deception mediates the relationship between relationship type and relationship uncertainty after the transition to a mutually committed relationship.

### *Expectations*

Having partners not live up to expectations may be a common problem for online couples transitioning. As previously stated, most people who use online dating sites (78%) do so with the intent to find a long-term relationship (Brym & Lenton, 2001). This means most people initiate an online romance with the hopes it will turn into a long-term relationship. The longer couples stay online the more idealized their ideas are of their partner. According to the hyperpersonal perspective, the longer partners limit their interactions to only online communication, the greater the likelihood the impressions and expectations will be idealized (Ramirez & Zhang, 2007; Walther et al., 2001). Additionally, the longer couples stay online, the greater the likelihood partners may have constructed expectations for the future and it may be likely that online partners may not live up to expectations in later stages of the relationship.

Thus, the introduction of visual and other nonverbal cues inherent to face-to-face interaction is more likely to provide social information incongruent with expectations (Jacobson, 1999) if the individuals remain online for a long period of time prior to a transition to a more serious relationship. This disconfirming expectation may increase uncertainty about the relationship. If the transition does not go smoothly or if the partner does not live up to expectations, uncertainty about the relationship may increase. Thus, the following hypotheses are posed:

*H12:* After the transition to a mutually committed relationship, individuals in online relationships report less met expectations than individuals in face-to-face transitioning relationships.

*H13:* After the transition to a mutually committed relationship, met expectations is negatively related to relationship uncertainty in both online and offline transitioning relationships.

*H14:* Met expectations mediate the relationship between relationship type and relationship uncertainty after the transition to a mutually committed relationship.

The current study hypothesized that both met expectations and deception mediate the relationship between relationship type and uncertainty after the transition to a mutually committed relationship. Both hypotheses were proposed because, according to the hyperpersonal perspective, idealized impressions are formed online and, for deception, if these impressions are formed based on deceptive information, uncertainty may rise. For met expectations, however, if idealized impressions create certain expectations that are not fulfilled by the partner, uncertainty may rise. Therefore, because the rationales for both *H11* and *H14* are similar, and that deception may result in unmet expectations, a research question to further explore whether deception and



met expectations make unique contributions in explaining the association between relationship type and uncertainty is posed.

RQ1: Do the degree of deception and met expectations uniquely mediate the relationship between relationship type and relationship uncertainty after the transition to a mutually committed relationship when assessed simultaneously?

### *Study Overview*

The relational turbulence model emphasizes how transitions in romantic relationships can raise questions about the association, intimacy, and communication patterns within the relationship. In turn, uncertainty makes people more reactive to the variety of irritations, interferences, and surprises that might occur during a transition. Importantly, the experience of turbulence is not wholly negative. As partners resolve doubts and uncertainty, they may reaffirm their commitment and work through challenges together (Knobloch & Solomon, 2002a). Thus, the relational turbulence model highlights how transitions require individuals to establish or revisit the foundations of their relationship in ways that can either hinder or enhance connections between partners.

Although research in online relationships has increased in the last decade, transitions in these relationships remain poorly understood (Albright & Conran, 2003; Cornwell & Lundgren, 2001; Levine, 2000; Merkle & Richardson, 2000; Whitty, 2002). Researchers have recommended additional investigations to learn more about online relationships (Baker, 2005; Papacharissi & Rubin, 2000; Peris et al., 2002; Shaw & Gant, 2002; Wildermuth, 2004). As discussed in this chapter, although scholars have provided a growing body of research in online relationships, how these relationships make the transition from casually to seriously dating (e.g.,

transitioning offline) has not been extensively investigated. The purpose of this study is to understand and describe how romantic relationships initiated and maintained online are impacted by transitioning from a casual to serious relationship and how these relationships compare to more traditional, offline relationships. The questions this dissertation address include inquiries about the association between intimacy and uncertainty in online romantic relationships, both before and after they transition as well as how the discovery of deception in these relationships influence uncertainty. Further hypotheses include how uncertainty is related indirect communication patterns, topic avoidance, and perceptions of increased turmoil in transitioning relationships. The next chapter will present the methodology used to test the hypotheses and research question posed as well as a general overview of the participants and procedure utilized.

### **Chapter 3: Methods**

This section of the dissertation includes information about the participants, procedures, and measures that were utilized in the study. A questionnaire was developed to collect data for the current investigation. Data were collected about participants' past experience when they transitioned from a casual to serious relationship. The participants were instructed to remember the transition in their romantic relationships, and directed to fill out the questionnaire based on their recollections. The study was approved by the Institutional Review Board (IRB) and the participant consent form can be found in Appendix A.

#### *Participants and Procedures*

There were two groups of participants. Each group responded individually to a number of communication and relationship measures. Participants were recruited via Amazon's Mechanical Turk in complete anonymity and were asked to complete an external online survey (Qualtrics). Mechanical Turk (MTurk) is a crowdsourcing Internet marketplace that enables data collection from a diverse workforce of over 150,000 users from over 100 countries who complete tens of thousands of tasks daily (Paolacci, Chandler, & Ipeirotis, 2010). Individuals register as "requesters" (task creators) or "workers" (paid task completers). Requesters can create and post virtually any task that can be done at a computer (i.e., surveys) using templates, technical scripts, or linking workers to external online survey tools (e.g., Qualtrics). Requesters of data can set demographic requirements of participants. For the current study, participants were required to be U.S. citizens over the age of 18 years old and in a romantic relationship for at least 2 months.

Findings have indicated that MTurk participants are more representative of the U.S. population than standard Internet samples and are significantly more diverse than typical American college samples. Data collected via MTurk are as reliable as data obtained via

traditional methods (DeScioli & Kurzban, 2009). The participants for each group are described below.

*Online relationship group.* The online romantic relationship group included 194 individuals who were currently in a romantic relationship that was initiated on *eHarmony.com* and then transitioned offline. In addition to utilizing MTurk, the decision was made to gather online romantic relationship participants who had all used the same dating website to find romantic partners. Each dating site utilizes a different method for how users communicate and “meet” one other. In order to create consistency within the online relationship group, one site, *eHarmony.com*, was chosen in order to ensure online relationship participants “met” their romantic partner in similar ways.

Each participant in the online relationship group must have had their relationship exclusively online for at least two months before transitioning offline in order to participate. The requirement to be online for at least two months prior to moving offline in order to participate is so that participants will have developed and established a relationship online before moving offline. Participants’ average time online before the transition was 3 months, with a range of 2 to 5 months. In order for participants to effectively recall perceptions of their transition, participants must have been in the relationship for no longer than 2 years. Of all the participants in this group, ninety-six (51.6%) were men and ninety-one (46.6%) were women. Their ages ranged from 20 to 78, and their mean age was 30.2 ( $SD = 10.19$ ). Of the total sample, 69.9% were Caucasian, 5.7% were Hispanic, 14.9% were Asian-American, 5.7% were African-American, and 1.6% were other or multiple ethnicities. Participants reported their highest completed education level to be: 2.1% some high school, 10.9% high school, 24.9% some college, 36.3% college, 23.3% graduate degree, and 0.5% post-graduate degree. The duration of the relationships that participants

described in the study ranged from 3 months to two years with a mean of 13 months ( $SD = 1.93$  months). Participants reported their relational status: 18.7% were seriously dating, 35.2% were in a long term relationship, 33.7% were engaged, and 12.4% were married. No one reported that they were casually dating. Participants reported how far (in miles) they currently lived from their romantic partner: 43.5% lived within 10 miles, 39.1% lived within 10-25 miles, 11.2% lived within 25-50 miles, and 6.2% lived over 50 miles from their partner.

Online relationship participants responded to a variety of questions about their technology use. Participants were asked how often they communicated with their partner prior to moving offline: 36.7% reported more than once a day, 23.8% reported once a day, 28.5% said a few times a week, 4.2% said once a week, and 2.6% said less than once a week. Participants reported how often they used email to communicate with their partner prior to moving offline: 31.9% reported more than once a day, 22.9% reported once a day, 25.9% said a few times a week, 12.9% once a week and 6.4% said never. Participants were asked how often they used an instant messaging service: 10.4% said more than once a day, 18.7% reported once a day, 26.9% said a few times a week, 14.0% said once a week, 14.5% said less than once a week, and 15.5% said never. Finally, participants reported how often they used the phone to communicate with their partner prior to moving offline: 8.9% said more than once a day, 19.4% reported once a day, 27.3% reported a few times a week, 18.1% reported once a week, 11.3% reported less than once a week, and 15.0% said never.

*Face-to-face relationship group.* The second group of participants included 205 individuals who were currently in a serious romantic relationship at least 2 months but no longer than 2 years that was initiated in-person. Individuals were solicited via Mechanical Turk and

were able to complete the Qualtrics survey online in complete anonymity. Participants had to be at least 18 years of age and U.S. citizens.

Of the face-to-face relationship participants, 34.1% were men and 65.9% were women. Their ages ranged from 19 to 59, and their mean age was 28.7 ( $SD = 9.37$ ). Of the total sample, 69.9% were Caucasian, 5.7% were Hispanic, 14.9% were Asian-American, 5.7% were African-American, and 1.6% were other or multiple ethnicities. Participants reported their highest completed education level to be: 1.5% some high school, 7.3% high school, 37.6% some college, 37.1% college, 14.1% graduate degree, and 1.5% post-graduate degree. The duration of the relationships that participants described in the study ranged from 4 months to 2 years with a mean of 13.2 months ( $SD = 2.3$  months). The average length of time participants were together before the relationship became serious was 4.9 months ( $SD = 1.4$  months). The types of relationship events that indicated a transition from casual to serious relationship were reported: 29.8% were saying “I love you”, 19.9% were an intimate or physical encounter, 15.5% were family events, such as a wedding or meeting the parents, 10.2% were having a discussion about exclusivity or being boyfriend/girlfriend, 5.6% were going on a trip together, 3.2% were moving in together, and 15.8% were other events. All participants reported that they were still in the relationship and their relationship status: 20% were seriously dating, 51.7% were in a long term relationship, 25.4% were engaged, and 2.9% were married. No one reported that they were casually dating. Participants reported how far (in miles) they currently lived from their romantic partner: 60.0% lived within 10 miles, 25.6% lived within 10-25 miles, 7.3% lived within 25-50 miles, and 7.1% lived over 50 miles from their partner. Although the online group had a little more even split between sex, the groups were relatively similar in age, ethnicity and education.

## *Measures*

A variety of closed-ended Likert-type scales and open-ended questions were used to operationalize the variables in this study. The questionnaire consisted of three sections. Section one asked questions about participants' perception of uncertainty and intimacy in their relationship before they made a transition in their relationship.

In an effort to add time between answering questions about their relationship before and after the transition, participants answered demographic questions in section two. This provided a break for participants in answering questions about relational qualities (particularly uncertainty and intimacy) at different points in the relationship. Specifically, section two asked for basic demographic information, including age, sex, race/ethnicity, education level, relationship status (e.g., casually dating, seriously dating, or engaged), and length of the current relationship.

Participants were asked in an open-ended question to describe the event, time or interaction when they thought the relationship became more serious. Responses were coded and 71% of participants in the online romantic relationship group reported that a turning point in their relationship was when they moved the relationship offline. Participants in the online group were then asked to what extent the transition reflected the seriousness of their relationship: 31.1% said it became much more serious, 40.6% said it became more serious, 20.7% said it became a little more serious, and 8.4% said it remained just as serious.

Section three focused on participants' perception of their relationship after they made a transition in their relationship. In section three, participants were asked to think about their romantic relationship after their transition when they completed the same uncertainty and intimacy measures as in section one as well as measures of partner interference, met expectations, deception, turmoil, directness of communication, and topic avoidance. Intimacy

and uncertainty were measured regarding both before and after the transition; all other scales were measured only regarding after the transition. A description of each measure and the alpha reliabilities for both the online and face-to-face groups are presented below.

*Intimacy.* Consistent with Solomon and Knobloch's (2004) previous test of relational turbulence, intimacy was measured using Rubin's (1970) Love Scale. The scale assessed three general components of intimacy: Feelings of affiliative need, willingness to help, and exclusiveness toward a partner. Participants answered questions on a 6-point Likert-type scale (1 = *not at all true*, 6 = *definitely true*) that indicated the extent to which nine statements were true of them. The nine items included: (a) I would do anything for my partner; (b) If I am lonely, my first thought is to seek my partner out; (c) One of my primary concerns is my partner's welfare; (d) I feel responsible for my partner's well-being; (e) I feel that I could confide in my partner about virtually everything; (f) If I couldn't be with my partner, I would feel miserable; (g) I would forgive my partner for practically anything; (h) I would enjoy being confided in by my partner; and (i) It would be hard for me to get along without my partner. Participants' scores were averaged to create an overall intimacy score for before the transition and after the transition. Alpha reliability scores for intimacy before the transition were .86 for the online group and .90 for the face-to-face group. Intimacy after the transition had an alpha reliability of .91 for the online group and .96 for the face-to-face group. The intimacy measure can be found in Appendix B.

*Relationship uncertainty.* Items developed from Knobloch and Solomon's (1999) work on relational turbulence were used to access relationship uncertainty. Participants were presented with a stem that read "How certain are you about..." followed by a series of statements. Participants used a 6-point Likert scale (1 = *completely uncertain*, 6 = *completely certain*) to rate



their certainty with each of the statements. The relationship uncertainty subscale comprised of eight items: (a) whether or not the relationship will work out in the long run; (b) whether or not you and your partner feel the same way about each other; (c) whether or not you and your partner will stay together; (d) whether or the relationship is a romantic one; (e) the boundaries for appropriate and/or inappropriate behavior in the relationship; (f) whether or not your partner likes you as much as you like him/her; (g) whether or not it is a romantic or a platonic relationship; and (h) how you can or cannot behave around your partner. Responses to all items were reverse-scored so that higher scores represented greater relationship uncertainty. Before the transition, the online group had a relationship uncertainty alpha reliability of .92 and the face-to-face group had an alpha reliability of .90. After the transition, the online group had an alpha reliability of .91 compared to the face-to-face group's alpha reliability of .97. The relationship uncertainty measure can be found in Appendix C.

*Partner interference.* Based on a measure developed by Solomon and Knobloch (2001), participants recorded their perceptions of their partner's interference after their transition. Using a 6-point Likert scale (1 = *strongly disagree*, 6 = *strongly agree*), five items comprised the measure, including: (a) My partner interferes with the plans I make; (b) My partner interferes with my plans to attend social events; (c) My partner interferes with the amount of time I spend with my friends and family; (d) my partner interferes with how much time I devote to my work; and (e) my partner interferes with the things I need to do each day. Partner interference had an alpha reliability score .90 for the online group and .86 for the face-to-face group. The partner interference measure can be found in Appendix D.

*Directness of communication.* Based on a measure developed by Theiss and Solomon (2006), participants recorded their agreement with a series of statements measuring their

directness of communication about their relationship experiences with their partner. Using a 6-point Likert scale (1 = *strongly disagree*, 6 = *strongly agree*), four items comprise the measure of communication directness, including: (a) I have explicitly told my partner about behaviors that irritate me; (b) I have had a direct conversation with my partner about my irritations; (c) I openly tell my partner when I am feeling jealous; and (d) When I feel jealous I tell my partner how I am feeling. Items were reverse coded so that higher values represent perceptions of more indirect communication. For the online group, there was an alpha reliability of .95 and the face-to-face group had an alpha reliability of .87. The directness of communication measure can be found in Appendix E.

*Topic avoidance.* To measure topic avoidance, Guerrero and Afifi's (1995) measure was utilized. Topic avoidance of (a) relationship issues, (b) negative life experiences, (c) dating experiences, (d) friendships, (e) sexual experiences, and (f) current relationship concerns was assessed. Participants were asked to indicate the extent to which they avoid each topic (1 = *never avoid*, 6 = *always avoid*). Topic avoidance for the online group had an alpha reliability of .87 and an alpha reliability of .91 for the face-to-face group. The topic avoidance measure can be found in Appendix F.

*Turmoil.* To measure turmoil, self-report items developed by Knobloch (2007) accessed participants' judgments of relational turbulence. Participants indicated their agreement (1 = *strongly disagree*, 6 = *strongly agree*) with descriptors completing the stem "At the present time, this relationship is . . ." Eight adjectives comprised a unidimensional scale: (a) turbulent, (b) chaotic, (c) in turmoil, (d) tumultuous, (e) hectic, (f) frenzied, (g) overwhelming, and (h) stressful. Items were scored so that higher values represent perceptions of more turbulence.

The online group turmoil measure had an alpha reliability of .96 and the face-to-face group had an alpha reliability of .90. The turmoil measure can be found in Appendix G.

*Deception.* Participants were asked if at any time during their relationship they were deceived. If participants answer “yes,” they were provided with a blank text-box to describe any deception. For those who answered “yes,” the deception was measured by asking participants to report both the amount and severity of deception experienced in their relationship. For amount, participants were asked “Overall, how many deceptive acts by your partner did you discover while you were transitioning?” (1 = *no deceptive acts*, 6 = *a severe amount of deceptive acts*). For severity, participants were asked “Overall, regardless of the amount of deceptive acts, how severely (if at all) do you think you were deceived by your partner prior to the transition?” (1 = *not deceived at all*, 6 = *severely deceived by my partner*). Answers from these questions were combined by averaging the two scores to create an overall degree of deception score. Although this variable was not normally distributed, a transformed version of it was also skewed so the raw score was employed in the analyses. Deception for the online group had an alpha reliability of .60 and an alpha reliability of .64 for the face-to-face group.

*Met expectations.* To assess expectations, a modified version of Stafford and Canary’s (1991) maintenance scale was used. This scale has been previous used to access expectations in romantic relationships (e.g., Dainton, 2000). Participants were asked to think of expectations they had for what they thought their relationship would be like after they made the transition to a more serious relationship. They were then asked to think about their expectations, and indicate the extent to which they agreed with the statements. The statements were framed in terms of participants’ perceptions of each expectation being met by their partner after the transition. Participants indicated their agreement (1 = *strongly disagree*, 6 = *strongly agree*) with situations

completing the stem “your partner met your expectations for...” The scale comprised of 9 items: (a) making interactions pleasant, (b) sharing open communication with you, (c) being a supportive partner, (d) completing tasks in the relationship, (e) finding time to spend with you, (f) not avoiding issues we need to discuss, (g) having positive social behaviors, (h) having a sense of humor you enjoy, and (i) being physically attracted to them. Met expectations had an alpha reliability of .97 for the online group and .92 for the face-to-face group. The met expectations measure can be found in Appendix H.

Table 1: Means and Standard Deviations for Independent and Dependent Variables

	<i>M</i>	<i>SD</i>
1. Intimacy (before transition)**		
Online	4.54	0.76
Offline	4.02	0.97
2. Intimacy (after transition)***		
Online	3.03	1.06
Offline***	5.01	0.77
3. Relationship uncertainty (before transition)		
Online	4.41	0.95
Offline	4.05	0.90
4. Relationship uncertainty*** (after transition)		
Online	3.17	1.07
Offline	5.19	0.73
5. Partner Interference		
Online	4.46	1.13
Offline	2.87	1.20
6. Directness of Communication***		
Online	2.67	1.23
Offline	4.18	1.01
7. Topic Avoidance**		
Online	3.97	1.32
Offline	2.40	0.78
8. Turmoil**		
Online	4.30	1.30
Offline	2.58	1.15
9. Met Expectations***		
Online	4.00	1.36
Offline	4.98	0.71

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10. Partner Deception		
Online	2.13	0.41
Offline	2.27	0.56
11. Severity of Deception**		
Online	3.05	1.28
Offline	3.46	1.43
<hr/>		
<i>Note.</i> Means are significantly different at * $p < .05$ , ** $p < .01$ , *** $p < .001$		

Table 2: Bivariate Correlations among the Variables in the Online Relationship Group

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Intimacy - before	--										
2. Intimacy - after	-0.06	--									
3. Relationship Uncertainty - before	0.41**	-0.06	--								
4. Relationship Uncertainty - after	0.02	0.68**	-0.05	--							
5. Partner Interference	-0.02	-0.10	0.02	-0.03	--						
6. Directness of Communication	0.04	-0.05	0.12	0.07	-0.08	--					
7. Topic Avoidance	-0.02	-0.13	0.06	-0.17*	0.01	-0.07	--				
8. Turmoil	-0.01	-0.07	-0.01	-0.20**	0.16*	0.02	0.64**	--			
9. Expectation	0.08	-0.13	0.29**	-0.02	0.20	0.10	-0.20	0.10	--		
10. Partner Deception	-0.16*	-0.03	-0.11	0.10	0.21**	0.14	-0.07	0.23**	-0.06	--	
11. Severity of Deception	-0.12	0.06	-0.14	0.14	0.30*	0.14	-0.05	0.30**	-0.04	0.95***	--

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . All correlations reported at the two-tailed level.

Table 3: Bivariate Correlations among the Variables in the Face-to-Face Relationship Group

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Intimacy - before	--										
2. Intimacy - after	0.59**	--									
3. Relationship Uncertainty - before	0.54**	0.51**	--								
4. Relationship Uncertainty - after	0.36**	0.65**	0.65**	--							
5. Partner Interference	0.00	-0.17**	0.07	-0.17*	--						
6. Directness of Communication	0.07	0.02	0.07	0.05	0.09	--					
7. Topic Avoidance	0.01	0.14*	-0.06	-0.21**	0.31**	-0.24**	--				
8. Turmoil	0.13	-0.02	-0.09	-0.20**	0.37**	0.11	0.39**	--			
9. Expectation	0.10	0.32**	0.28**	0.48**	-0.30**	-0.01	-0.35**		--		
10. Partner Deception	-0.14*	0.10	-0.07	0.09	0.23**	0.10	0.12	0.26**	-0.09	--	
11. Severity of Deception	-0.19	0.20	-0.09	0.04	0.25**	0.06	0.20	0.23**	-0.01	0.96***	--

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . All correlations reported at the two-tailed level

## Chapter 4: Results

Aligning with the parameters of the relational turbulence model, the purpose of this study was to investigate how relationship uncertainty, intimacy, deception, directness of communication, and expectations surface within issues that confront people moving an online romantic relationship offline. To begin, correlations were run on both the online and offline relationship groups to evaluate for possible control variables (see Tables 4 through 9). The relationship status variable was correlated with intimacy (both before and after the transition) and relationship uncertainty before the transition.

*Hypothesis 1.* Hypothesis 1 predicted that prior to the transition from a casual dating to mutually committed relationship, individuals in online romantic relationships will experience a negative association between intimacy and relationship uncertainty. Controlling for relationship status, a bivariate correlations was conducted,  $r(397) = -.39, p < .01$ , and revealed that prior to the transition from a casually dating to a mutually committed relationship, there is a negative association between intimacy and relationship uncertainty. Accordingly, H1 was supported.

*Hypothesis 2.* Hypothesis 2 predicted that prior to the transition from casually dating to a mutually committed relationship, individuals in online romantic relationships will have higher intimacy levels than individuals in face-to-face relationships. Controlling for relationship status, an analysis of covariance (ANCOVA) was conducted,  $F(1, 395) = 41.22, p < .001$ , and revealed that prior to the transition from a casually dating to a mutually committed relationship, there are differences between individuals in online romantic relationships and individuals in face-to-face relationships. With a significant main effect, the online relationship group ( $M = 4.54, SD = .76$ ) reported significantly more intimacy than the face-to-face relationship group ( $M = 4.02, SD = .97$ ). Therefore, H2 was supported.



*Hypothesis 3.* Hypothesis 3 stated that after their transition from casually dating to a mutually committed relationship, individuals in online romantic relationships will have lower levels of intimacy than individuals in face-to-face relationships. Controlling for relationship status, an analysis of covariance (ANCOVA) was run to test differences,  $F(1, 395) = 408.65, p < .001$ , and found that after the transition there were differences between individuals in online romantic relationships and individuals in face-to-face relationships. A comparison of means found that individuals in online romantic relationships ( $M = 3.03, SD = 1.06$ ) were significantly lower than individuals in face-to-face relationships ( $M = 5.01, SD = .77$ ). Additionally, analyses were run to test the change differences between intimacy scores prior to the transition and after the transition. The means of the change scores were 1.51 for the online group and -.99 for the offline group. There was a significant difference between the change scores,  $t(395) = 23.43, p < .001$ . Accordingly, H3 was supported.

*Hypothesis 4.* Hypothesis 4 predicted that prior to the transition from casually dating to a mutually committed relationship, individuals in online romantic relationships will have lower levels of relationship uncertainty than individuals in face-to-face relationship. Since the means of relationship uncertainty in both the online and offline groups were not normally distributed, relationship uncertainty was transformed using log transformation. Controlling for relationship status, an analysis of covariance (ANCOVA) was run to test differences,  $F(1, 392) = 34.64, p < .001$ , and significant differences were found. A comparison of raw means found that individuals in online romantic relationships ( $M = 1.59, SD = .95$ ) did, on average, have lower relationship uncertainty scores than individuals in face-to-face relationships ( $M = 1.95, SD = .90$ ). Since differences in the main effect were significant, H4 was supported.

*Hypothesis 5.* H5 proposed that individuals in online romantic relationships have higher levels of relationship uncertainty than individuals in face-to-face relationships after the transition. An analysis of variance (ANOVA),  $F(1, 396) = 381.27, p < .001$ , showed significant differences between the online and offline groups. A comparison of means found that individuals in online romantic relationships ( $M = 2.83, SD = 1.07$ ) had significantly higher relationship uncertainty than individuals in face-to-face relationships ( $M = .81, SD = .73$ ). Additionally, analyses were run to test the change differences between relationship uncertainty scores prior to the transition and after the transition. The means of the change scores were 1.24 for the online group and -1.14 for the offline group. There was a significant difference between the change scores,  $t(395) = 11.01, p < .001$ . Accordingly, H5 was supported.

*Hypothesis 6.* Hypothesis 6 predicted that relationship uncertainty after the transition would be positively associated with partner interference, indirect communication patterns, topic avoidance, and perceptions of increased turmoil in the relationship for both the online and face-to-face groups. Bivariate correlations suggested that there were associations between relationship uncertainty and the four indicator variables. First, relationship uncertainty was positively correlated with partner interference,  $r(397) = .44, p < .01$ . People who noted an increase in relationship uncertainty after the transition also tended to report higher partner interference. There was a positive association between relationship uncertainty and indirectness of communication,  $r(397) = .42, p < .01$ , with higher relationship uncertainty correlating with more indirect communication. Relationship uncertainty and topic avoidance were positively associated,  $r(397) = .52, p < .01$ , meaning that people who reported higher relationship uncertainty also tended to report avoiding topics to a greater extent with their partners. Finally,

relationship uncertainty was associated with turmoil,  $r(397) = .47, p < .01$ , with higher relationship uncertainty being associated with higher turmoil perceptions.

Table 10: Bivariate Correlations among both the Online and Face-to-Face Relationship Groups Combined

Variable	1	2	3	4	5
1. Relationship Uncertainty (after)	--				
2. Partner Interference	.44**	--			
3. Indirectness of Communication	.42**	-.30**	--		
4. Topic Avoidance	.52**	.41**	-.41**	--	
5. Turmoil	.47**	.50**	-.26**	.70**	--

*Note.* \*\* $p < .01$ . All correlations reported at the two-tailed level.

In Tables 11 and 12, the relationships were assessed in the two groups separately. When examining the online romantic relationship group specifically, relationship uncertainty was positively correlated with topic avoidance,  $r(193) = .17, p < .05$ , and turmoil,  $r(193) = .20, p < .01$ , meaning that when individuals perceived more relationship uncertainty, topic avoidance and perceived turmoil in the relationship increased.

Table 11: Bivariate Correlations among Online Romantic Relationship Indicators

Variable	1	2	3	4	5
1. Relationship Uncertainty (after)	--				
2. Partner Interference	.03	--			
3. Indirectness of Communication	.07	-.08	--		
4. Topic Avoidance	.17*	.01	-.07	--	
5. Turmoil	.20**	.16*	-.02	.64***	--

*Note.* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . All correlations reported at the two-tailed level.

Upon examination of relationship uncertainty and the four indicator variables among the face-to-face romantic relationship group, relationship uncertainty was positively correlated with partner interference,  $r(205) = .17, p < .05$ , topic avoidance,  $r(205) = .21, p < .01$ , and turmoil,  $r(205) = .20, p < .01$ . For face-to-face relationships, as individuals became more uncertain about their relationship, perceptions of partner interference, topic avoidance, and turmoil increased.

Table 12: Bivariate Correlations among Face-to-Face Romantic Relationship Indicators

Variable	1	2	3	4	5
1. Relationship Uncertainty (after)	--				
2. Partner Interference	.17*	--			
3. Indirectness of Communication	.05	.09	--		
4. Topic Avoidance	.21**	.31**	-.24**	--	
5. Turmoil	.20**	.37**	-.11**	.39**	--

*Note.* \* $p < .05$ , \*\* $p < .01$ . All correlations reported at the two-tailed level.

When examining both the online and face-to-face relationship groups together, relationship uncertainty was associated with partner interference, indirect communication patterns, topic avoidance, and increased turmoil in the relationship. Conversely, in the face-to-face relationship group, relationship uncertainty was associated with partner interference, topic avoidance, and turmoil. Specifically, the face-to-face group experienced more and stronger associations between relationship uncertainty and the four indicator variables than the online group. Because all the variables were not correlated with relationship uncertainty when examining the groups individually, H6 was partially supported.

*Hypothesis 7.* Hypothesis 7 stated that the relationship between relationship uncertainty and a) partner interference, b) indirect communication patterns, c) topic avoidance, and d) perceptions of increased turmoil would be moderated by relationship type such that the associations between relationship uncertainty and partner interference, indirect communication, topic avoidance, and turmoil would be stronger for individuals who have transitioned in an online romantic relationship than individuals who have transitioned in a face-to-face relationship. To test hypothesis 7, hierarchical regression analysis as suggested by Baron and Kenny (1986) was used: The communication variable was entered on the first step, relationship type was entered on the second step, and these two main effects and the interaction between the

communication variable and relationship type was added in the third step. Separate analyses were run for each predictor variable.

Table 13: Summary of Multiple Regression Moderation Analyses for Relationship Type with Partner Interference and Relationship Uncertainty ( $N = 397$ )

Model	<i>B</i> Unstandardized Coefficients	<i>SE</i>	$\beta$ Standardized coefficients	$R^2$	$\Delta R^2$
Step 1				.20	.20***
Partner Interference	-.45	.05	-.44***		
Step 2				.48	.30***
Partner Interference	-.07	.04	-.07		
Relationship Type	1.90	.12	.66***		
Step 3				.50	.001
Partner Interference	.04	.14	.03		
Relationship Type	2.16	.35	.75***		
Partner Interference by Relationship Type	-.69	.09	-.10		

Dependent Variable: Relationship Uncertainty after the transition

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 13 shows the outcome of the hierarchical regression for Partner Interference.

Partner interference did predict relationship uncertainty in Step 1 but did not remain a significant predictor of relationship uncertainty beyond Step 1. Relationship type significantly added to the predictive value of the model ( $\Delta R^2 = .30, p < .01$ ) in Step 2 and remained a significant predictor in Step 3. The interaction term (Partner Interference by Relationship Type) was not found to be a significant predictor of relationship uncertainty,  $\beta = -.10, p = .43$ , indicating that relationship type did not have a significant moderating effect for the relationship between partner interference and relationship uncertainty.

Table 14: Summary of Multiple Regression Moderation Analyses for Relationship Type with Indirect Communication Patterns and Relationship Uncertainty ( $N = 397$ )

Model	$B$ Unstandardized Coefficients	$SE$	$\beta$ Standardized coefficients	$R^2$	$\Delta R^2$
Step 1				.17	.17***
Indirect Communication	.43	.05	.42***		
Step 2				.49	.32***
Indirect Communication	.05	.04	.05		
Relationship Type	1.94	.12	.67***		
Step 3				.49	0.00
Indirect Communication	.12	.14	.11		
Relationship Type	1.94	.12	.67***		
Indirect Communication by Relationship Type	-.04	.09	-.06		

Dependent Variable: Relationship Uncertainty after the transition

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 14 shows the results of the hierarchical regression for indirect communication.

Indirect communication did predict relationship uncertainty in Step 1 but did not remain a significant predictor of relationship uncertainty beyond Step 1. Relationship type significantly added to the predictive value of the model ( $\Delta R^2 = .32, p < .01$ ) in Step 2 and remained a significant predictor in Step 3. The interaction term (Indirect Communication by Relationship Type) was not found to be a significant predictor of relationship uncertainty,  $\beta = -.06, p = .63$ , so a moderation effect was not indicated.

Table 15 indicates the results for the hierarchical regression for topic avoidance. Topic avoidance did predict relationship uncertainty in Step 1 and 2 but did not remain a significant predictor of relationship uncertainty beyond Step 2. Relationship type significantly added to the predictive value of the model ( $\Delta R^2 = .24, p < .01$ ) in Step 2 and remained a significant predictor in Step 3. The interaction term (Topic Avoidance by Relationship Type) was not found to be a significant predictor of relationship uncertainty,  $\beta = -.03, p = .79$ , therefore a moderation effect was not indicated.

Table 15: Summary of Multiple Regression Moderation Analyses for Relationship Type with Topic Avoidance and Relationship Uncertainty ( $N = 397$ )

Model	$B$ Unstandardized Coefficients	$SE$	$\beta$ Standardized coefficients	$R^2$	$\Delta R^2$
Step 1				.26	.26***
Topic Avoidance	-.56	.04	-.52***		
Step 2				.51	.24***
Topic Avoidance	-.17	.05	-.16***		
Relationship Type	1.75	.13	.61***		
Step 3				.51	0.00
Topic Avoidance	-.14	.14	-.13		
Relationship Type	1.83	.33	.63***		
Topic Avoidance by Relationship Type	-.03	.11	-.03		

Dependent Variable: Relationship Uncertainty after the transition

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Finally, Table 16 shows the results of the hierarchical regression for Turmoil. Results highlight that turmoil did predict relationship uncertainty in Step 1 and 2 but did not remain a significant predictor of relationship uncertainty beyond Step 2. Relationship type significantly added to the predictive value of the model ( $\Delta R^2 = .28, p < .01$ ) in Step 2 and remained a significant predictor in Step 3. The interaction term (Turmoil by Relationship Type) was not found to be a significant predictor of relationship uncertainty,  $\beta = -.06, p = .67$ , and accordingly a moderation effect was not indicated. Because the relationship between relationship uncertainty and a) partner interference, b) indirect communication patterns, c) topic avoidance, and d) turmoil were not found to be moderated by relationship type, H7 was not supported.

Table 16: Summary of Multiple Regression Moderation Analyses for Relationship Type with Turmoil and Relationship Uncertainty ( $N = 397$ )

Model	$B$	$SE$	$\beta$	$R^2$	$\Delta R^2$
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	Unstandardized Coefficients		Standardized coefficients		
Step 1				.22	.22***
Turmoil	-.44	.04	-.47***		
Step 2				.50	.28***
Turmoil	-.11	.04	-.11**		
Relationship Type	1.84	.12	.64***		
Step 3				.50	.00
Turmoil	-.06	.12	-.06		
Relationship Type	1.83	.12	.64***		
Turmoil by Relationship Type	-.04	.08	-.06		

Dependent Variable: Relationship Uncertainty after the transition

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

*Hypothesis 8.* Hypothesis 8 predicted that after the transition to a mutually committed relationship, individuals in online relationships transitioning offline will discover a greater amount of deception than individuals in face-to-face transitioning relationships. An analysis of variance (ANOVA) was run to test differences,  $F(1, 55) = 2.88, p = .10$ , and differences between the online and offline group were not found to be significant. In a comparison of means, the face-to-face romantic relationship group ( $M = 2.13, SD = .41$ ) experienced more deception during their relationship than the online romantic relationship group ( $M = 2.27, SD = .56$ ). Therefore, H8 was not supported.

*Hypothesis 9.* It was predicted that individuals in online relationships transitioning offline will discover more severe deception than individuals in face-to-face transitioning relationships. In a comparison of severity of deception scores between groups, the face-to-face romantic relationship group ( $M = 3.46, SD = 1.43$ ) experienced more severe deception during their relationship than the online romantic relationship group ( $M = 3.05, SD = 1.28$ ). An analysis of variance (ANOVA) was run,  $F(1, 55) = 4.57, p < .05$ , and differences between the online and



offline group were found to be significant, however the face-to-face relationship group perceived more severe deception than the online relationship group. Accordingly, H9 was not supported.

*Hypothesis 10.* It was predicted that both before and after the transition, degree of deception would be positively related to relationship uncertainty in both the online and offline group. Bivariate correlations were run between degree of deception (a combination of amount and severity of deception) and both relationship uncertainty before and after a transition. For the online romantic relationship group, degree of deception was positively associated with relationship uncertainty before the transition,  $r(21) = .19, p < .05$ , meaning that as the degree of deception increased, relationship uncertainty increased. Degree of deception was also positively associated with relationship uncertainty after the transition,  $r(21) = .30, p < .05$ , with greater degree of deception being correlated with higher relationship uncertainty.

For the face-to-face romantic relationship group, degree of deception was not associated with relationship uncertainty before the transition,  $r(33) = .10, p = .21$ , or relationship uncertainty after the transition,  $r(33) = .08, p = .48$ . Since degree of deception was associated with relationship uncertainty in online romantic relationship but not in face-to-face romantic relationships, H10 was partially supported.

*Hypothesis 11.* It was put forth to examine degree of deception as a mediator in the link between relationship type and relationship uncertainty after the transition to a mutually committed relationship. Multiple regression analyses were performed to test the hypothesis (Baron & Kenny, 1986). According to Baron and Kenny, for a variable to be considered a mediator of an association between an independent and dependent variable, all three variables must be significantly inter-correlated. In addition, when the potential mediator is included in the connection between the independent and dependent variable, the significant association between

the latter two variables must become nonsignificant. More specifically, to test whether degree of deception was a mediating variable in the current study, the following associations were examined: (a) relationship type (the independent variable) and relationship uncertainty (the dependent variable), (b) relationship type (the independent variable) and degree of deception (the mediator), and (c) degree of deception (the mediator) and relationship uncertainty (the dependent variable). Finally, (d) degree of deception was added in a regression of relationship type on relationship uncertainty, and the association between relationship type and relationship uncertainty was examined once again.

As shown in Table 17, the association between relationship uncertainty and relationship type was significant,  $\beta = .24, p < .001$ . The link between degree of deception and relationship type was not significant,  $\beta = .13, p = .14$ , and the association between relationship uncertainty and degree of deception was significant,  $\beta = .21, p < .05$ . Since relationship type was not associated with deception and the significant association between relationship uncertainty and relationship type remained with the addition of degree of deception, degree of deception cannot be considered a mediator of this relationship. Therefore, H11 was not supported.

Table 17: Summary of Multiple Regression Mediation Analyses for the Degree of Deception with Relationship Type and Relationship Uncertainty ( $N = 56$ )

Predictor	$\beta$	$t$
Analysis A: Dependent variable: Relationship Uncertainty		
1. Relationship Type	.24	19.53***
Analysis B: Dependent variable: Degree of Deception		
1. Relationship Type	.13	1.59
Analysis C: Dependent variable: Relationship Uncertainty		
1. Degree of Deception	.21	3.32*
Analysis D: Dependent variable: Relationship Uncertainty		
1. Degree of Deception	.15	1.43
2. Relationship Type	.20	19.37***

*Note.* Overall regression for Analysis 4:  $F(2, 395) = 193.23, p < .001, R^2 = .50$ .

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

*Hypothesis 12.* It was predicated that after the transition to a mutually committed relationship, individuals in online relationships will report less met expectations than individuals in face-to-face relationships. An analysis of variance (ANOVA) was run,  $F(1, 397) = 13.81, p < .001$ , and differences between the online and offline group were found to be significant. In a comparison of met expectation scores between groups, the face-to-face romantic relationship group ( $M = 4.98, SD = .71$ ) experienced more met expectations during their relationship than the online romantic relationship group ( $M = 4.00, SD = 1.26$ ). Accordingly, H12 was supported.

*Hypothesis 13.* Hypothesis 13 predicted that after the transition to a mutually committed relationship, met expectations would be negatively related to relationship uncertainty in both online and face-to-face transitioning relationship. To assess H13 in offline relationships, a bivariate correlation was run between relationship uncertainty after the transition and met expectations. Results indicated a moderate, negative correlation between the two variables,  $r(204) = -.47, p < .001$ .

To assess H13 in online relationships, a bivariate correlation was run between relationship uncertainty after the transition and met expectations in online relationships. The variables were not correlated,  $r(192) = .02, p = .79$ . Since results indicate a moderate, negative correlation for the offline relationship group but no correlation for the online relationship group, H13 was partially supported.

*Hypothesis 14.* It was put forth to examine met expectations as a mediator in the link between relationship type and relationship uncertainty after the transition to a mutually committed relationship. Similar to the analysis in H11, multiple regression analyses were performed to test the hypothesis (Baron & Kenny, 1986). To test whether met expectations was a mediating variable in the current study, the associations between (a) relationship type (the

independent variable) and relationship uncertainty (the dependent variable), (b) relationship type (the independent variable) and met expectations (the mediator), and (c) met expectations (the mediator) and relationship uncertainty (the dependent variable) were examined. Finally, (d) met expectations variable was added in a regression of relationship type on relationship uncertainty, and the association between relationship type and relationship uncertainty was examined once again.

As shown in Table 18, the association between relationship uncertainty and relationship type was significant,  $\beta = .24, p < .001$ . The link between met expectations and relationship type was significant,  $\beta = .98, p < .001$ , and the association between relationship uncertainty and met expectations was significant,  $\beta = .47, p < .001$ . The mediation is only partially supported because of association between relationship uncertainty and relationship type remained significant. A Sobel test, however, showed the mediating effect of met expectations,  $z = .21, p = .45$ , was not significant. Therefore, H14 was not supported.

Table 18: Summary of Multiple Regression Mediation Analyses for the Met Expectations with Relationship Type and Relationship Uncertainty ( $N = 397$ )

Predictor	$\beta$	$T$
Analysis A: Dependent variable: Relationship Uncertainty		
1. Relationship Type	.24	19.53***
Analysis B: Dependent variable: Met Expectations		
1. Relationship Type	.98	9.48***
Analysis C: Dependent variable: Relationship Uncertainty		
1. Met Expectations	.47	7.87***
Analysis D: Dependent variable: Relationship Uncertainty		
1. Met Expectations	.11	2.15***
2. Relationship Type	1.86	16.13***

*Note.* Overall regression for Analysis 4:  $F(2, 395) = 181.91, p < .001, R^2 = .48$ .

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

*Research Question 1.* Research Question 1 asked whether the degree of deception and met expectations variables uniquely mediated the relationship between relationship type and relationship uncertainty after the transition to a mutually committed relationship when assessed simultaneously. Because neither degree of deception (in H11) nor met expectations (in H14) significantly mediated the relationship between relationship type and relationship uncertainty, this analysis was unnecessary.

Table 4: Correlations between Dependent/Independent Variables and Control Variables among the Online Relationship Group

Dependent Variable	Sex	Age	Time before transition	Length of relationship
1. Intimacy (before)	.003	-.10	-.02	.04
2. Intimacy (after)	-.03	-.04	-.01	.05
3. Relationship Uncertainty (before)	-.13	.12	-.01	-.03
4. Relationship Uncertainty (after)	-.03	.01	-.03	-.03
5. Partner Interference	-.04	-.02	.07	-.06
6. Directness of Communication	.06	-.10	-.11	.04
7. Topic Avoidance	-.11	.10	.14	-.08
8. Turmoil	-.05	.05	.07	.07
9. Met Expectations	.11	.01	.07	.10
10. Partner Deception	.07	.04	-.01	-.05
11. Severity of Deception	.09	.03	-.04	-.08

*Note.* No correlations were significant at  $p < .05$ .

Table 5: Correlations between Dependent/Independent Variables and Control Variables among the Offline Relationship Group

Dependent Variable	Sex	Age	Time before transition	Length of relationship
1. Intimacy (before)	-.03	-.10	-.12	.03
2. Intimacy (after)	.02	-.12	-.07	.03
3. Relationship Uncertainty (before)	-.09	.10	.08	-.04
4. Relationship Uncertainty (after)	-.06	.12	.03	-.01
5. Partner Interference	-.05	-.03	.03	-.07
6. Directness of Communication	.07	.11	-.13	.05
7. Topic Avoidance	-.02	.01	.09	-.05
8. Turmoil	-.03	.01	.02	.03
9. Met Expectations	.01	-.01	-.07	.05
10. Partner Deception	.02	.02	.02	.02
11. Severity of Deception	.01	.01	.01	.01

*Note.* No correlations were significant at  $p < .05$ .

Table 6: Analysis of Variance of Independent/Dependent Variables and Education

	<i>F</i>	<i>p</i>
1. Intimacy (before transition)		
Online	.62	.69
Offline	1.62	.24
2. Intimacy (after transition)		
Online	.97	.44
Offline	1.11	.29
3. Relationship uncertainty (before transition)		
Online	.83	.53
Offline	1.13	.32
4. Relationship uncertainty (after transition)		
Online	.48	.79
Offline	1.01	.39
5. Partner Interference		
Online	.29	.92
Offline	.89	.50
6. Directness of Communication		
Online	1.43	.22
Offline	.87	.64
7. Topic Avoidance		
Online	1.02	.41
Offline		
8. Turmoil		
Online	1.10	.37
Offline	.98	.47
9. Met Expectations		
Online	.89	.48
Offline	.06	.99
10. Partner Deception		
Online	1.03	.41
Offline	.75	.59
11. Severity of Deception		
Online	.18	.94
Offline	.48	.74

*Note.* Education included four categories for analysis: some or graduated from high school, some college, graduated from college, graduate or post graduate degree. No *F*-statistics were significantly different at  $p < .05$ .

Table 7 Analysis of Variance of Independent/Dependent Variables and Ethnicity

	<i>F</i>	<i>p</i>
1. Intimacy (before transition)		
Online	.37	.83
Offline	.83	.24
2. Intimacy (after transition)		
Online	1.73	.15
Offline	1.76	.14
3. Relationship uncertainty (before transition)		
Online	.90	.46
Offline	1.17	.10
4. Relationship uncertainty (after transition)		
Online	.74	.57
Offline	1.15	.11
5. Partner Interference		
Online	.74	.56
Offline	.07	.99
6. Directness of Communication		
Online	1.04	.39
Offline	1.23	.31
7. Topic Avoidance		
Online	1.40	.23
Offline	.87	.48
8. Turmoil		
Online	1.45	.22
Offline	.93	.45
9. Met Expectations		
Online	1.34	.30
Offline	2.33	.06
10. Partner Deception		
Online	.97	.42
Offline	1.12	.35
11. Severity of Deception		
Online	1.16	.34
Offline	1.13	.35

*Note.* Ethnicity included five categories: Caucasian, Hispanic, Asian-American, African-American, other or multiple ethnicities. No *F*-statistics were significantly different at  $p < .05$ .



Table 8 Analysis of Variance of Independent/Dependent Variables and Distance

	<i>F</i>	<i>p</i>
1. Intimacy (before transition)		
Online	.85	.49
Offline	.82	.54
2. Intimacy (after transition)		
Online	.75	.56
Offline	.45	.80
3. Relationship uncertainty (before transition)		
Online	.97	.40
Offline	1.24	.28
4. Relationship uncertainty (after transition)		
Online	.75	.56
Offline	.90	.47
5. Partner Interference		
Online	1.70	.15
Offline	1.20	.29
6. Directness of Communication		
Online	1.64	.16
Offline	.84	.54
7. Topic Avoidance		
Online	1.68	.16
Offline	.95	.45
8. Turmoil		
Online	1.02	.40
Offline	1.38	.22
9. Met Expectations		
Online	1.59	.18
Offline	1.46	.20
10. Partner Deception		
Online	.49	.74
Offline	1.19	.31
11. Severity of Deception		
Online	.85	.49
Offline	1.07	.38

*Note.* Distance included four categories: lived within 10 miles of their partner, 10-25 miles, 25-50 miles, and over 50 miles. No *F*-statistics were significantly different at  $p < .05$ .

Table 9 Analysis of Variance of Independent/Dependent Variables and Relationship Status

	<i>F</i>	<i>p</i>
1. Intimacy (before transition)		
Online	2.77	.04*
Offline	1.55	.20
2. Intimacy (after transition)		
Online	.61	.61
Offline	3.03	.03*
3. Relationship uncertainty (before transition)		
Online	9.94	.00***
Offline	4.40	.01*
4. Relationship uncertainty (after transition)		
Online	2.53	.04*
Offline	7.58	.00***
5. Partner Interference		
Online	.35	.78
Offline	1.37	.25
6. Directness of Communication		
Online	.27	.85
Offline	.43	.73
7. Topic Avoidance		
Online	.95	.42
Offline	1.72	.17
8. Turmoil		
Online	.47	.70
Offline	1.17	.32
9. Met Expectations		
Online	1.65	.35
Offline	1.33	.27
10. Partner Deception		
Online	1.68	.35
Offline	1.98	.11
11. Severity of Deception		
Online	2.18	.09
Offline	2.01	.10

*Note.* Relationship status included four categories: seriously dating, in a long term relationship, engaged, and married. Means are significantly different at \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

## **Chapter 5: Discussion**

This dissertation opened by noting a lack of literature regarding people's experiences transitioning from an online to offline romantic relationship despite the exponentially growing use of the Internet to form romantic relationships as well as the likelihood that online relationships will essentially need to transition to an offline relationship for further relational development. Also noted was a need for empirical evidence regarding the experiences, perceptions and characteristics of romantic relationships transitioning from an online to offline romance, which for many is likely a transition to a more serious dating relationship. Theoretically, this study was one of the first to date to apply the relational turbulence model to online technologies and to relationships that used online technologies to initiate and escalate their relationship. More generally, this study hoped to gain a better understanding of effective transitions within this growing population of online-initiated romantic relationships. Taken together, the present dissertation explored the ways in which intimacy and relationship uncertainty affect reactions to transitioning from a casual to serious relationship, and how this particular relationship event is associated with relationship characteristics. To do so, individuals in both online and offline relationships were asked to complete surveys measuring relational characteristics before and after their relationship became serious.

This dissertation drew from both relational and CMC theories. In particular, the relational turbulence model (Solomon & Knobloch, 2004) was highlighted as a framework for examining intimacy and relationship uncertainty as they pertain to a variety of relational characteristics. The model posed as an explanation for relational characteristic changes as individuals move through points of transition within their relationship. Additionally, since participants began their

relationships in an online environment, the hyperpersonal perspective helped frame the study in comparing the two types of relationships.

Scholars are increasingly comparing CMC with face-to-face groups directly (e.g., Sassenberg, Boos, & Rabung, 2005; Walther, Loh, & Granka, 2005); however, attention is rarely paid to the effects of how changes in the primary medium can impact the personal relationship. The findings in this dissertation help clarify how transition changes in online romantic relationships, which was the transition offline for the majority of participants, were associated with perceptions of the relationship as well as highlight how the relational turbulence model applies to online romantic relationships. Further, links were observed between perceptions of the relationship prior to a specific relational transition and later relationship qualities. As noted, relationships that were initiated and established online were referred to as *online relationships*, and relationships initiated and established offline were referred to as *offline* or *face-to-face relationships*. I will start with a discussion of the relational turbulence model and the current study's findings. Then, implication for the findings and how the results extend the relationship turbulence model as well as online dating research are discussed. Finally, strengths and weaknesses of this investigation are highlighted followed by suggestions for future research.

### *The Relational Turbulence Model*

The relational turbulence model provides an understanding of how progression in a romantic relationship, particularly progression from a casual to serious relationship, has the potential to elicit various communicative behaviors. The changes that occur during the transition from casual to serious relationships bring forth more extreme emotional, cognitive, and communicative reactions to events (Solomon & Knobloch, 2001; 2004). Research have found that more extreme emotional experiences (Knobloch & Solomon, 2002b; Knobloch, Solomon, &

Cruz, 2001), cognitive appraisals (Knobloch & Solomon, 2005), and communication behaviors (Afifi & Burgoon, 1998; Knobloch & Carpenter-Theune, 2004; Knobloch & Solomon, 2003; Theiss & Solomon, 2006) surface when individuals indicate heightened levels of uncertainty. Thus, the theory points to relationship qualities that may affect communication patterns when couples transition from casual to serious relationships.

Looking at a more specific aspect of the model in regards to uncertainty, research indicates that uncertainty is associated with partner interference (Solomon & Knobloch, 2004), increased topic avoidance (Afifi & Burgoon, 1998; Knobloch & Carpenter-Theune, 2004), perceptions of increased turmoil in courtship (Knobloch, 2007) and indirect communication patterns (Knobloch, 2006; Theiss & Solomon, 2006). This dissertation suggests new ways of thinking about these associations as it studied online romantic relationships. Whereas previous tests of the relational turbulence model have tended to focus on face-to-face partners and how relational characteristics influenced their relationship at times of transition, this study additionally explored a less traditional type of relationship. Since most online participants indicated that the transition offline increased the seriousness of their relationship, their transition offline may be considered an increase in involvement of their relationship. A starting point of this study sought to evaluate relational quality differences between transitioning online romantic relationships and transitioning face-to-face romantic relationships and, specifically, looked at how intimacy levels change through periods of transition.

*Intimacy.* Guided by previous research on the relational turbulence model which have shown that as couples increase intimacy, they experience periods of turmoil that are characterized by increased reactivity to relational events (Solomon & Knobloch, 2001, 2004), the current study proposed that individuals in online romantic relationships would have higher

intimacy levels prior to the transition to a more serious relationship and lower intimacy levels after the transition than face-to-face romantic relationships. The current research suggested that heightened intimacy perceptions online would not transcend a transition into a more serious relationship. The results indicate that both the online and face-to-face groups were consistent with previous research that intimacy levels are affected by relational transitions. Further, as expected, this research revealed higher intimacy in online romantic relationships when compared to face-to-face relationships prior to a transition yet lower intimacy following a transition. As previously mentioned, Ramirez and Zhang (2007) found that non-romantic online partnerships transitioning offline had higher intimacy perceptions prior to the transition than face-to-face or strictly online partners yet lower intimacy perceptions after the transition than face-to-face partners. Findings from the current study help extend the relational turbulence model by highlighting that online relationships experience similar intimacy changes as they go through periods of transition as face-to-face relationships, albeit online relationships did experience more extreme differences in intimacy. Since the relational turbulence model has yet to be applied to online transitioning relationships, it is important to extend the ideas of the model to intimacy perceptions in online transitioning relationships, particularly since the hyperpersonal model emphasizes that intimacy may be higher in online relationships prior to a transition.

Findings support the hyperpersonal perspective that moving the relationship offline may mitigate any gains in intimacy online partners make over offline partners (Ramirez & Zhang, 2007). Following the hyperpersonal perspective, higher levels of intimacy in online couples prior to shifting offline is likely a product of heightened expectations developed via CMC that may not be met once the relationship transitions offline. Therefore, intimacy levels in relationships that transitioned offline were lower after the transition than strictly offline relationships.

In addition, findings are consistent with previous research on the relational turbulence model that intimacy in relationships decreases after a relational transition (Knobloch, 2007). Both the online and face-to-face groups experienced decreased intimacy perceptions after the transition. Even though the online group experienced greater intimacy differences in prior and post-transition perceptions, relationship turbulence model trends were seen in both groups. Therefore, the findings from this study can extend the ideas of the relationship turbulence model to online romantic relationships.

*Relationship uncertainty.* The relational turbulence model identifies relational uncertainty as a force that drives relational turbulence. In particular, relational uncertainty refers to an individual's involvement within close relationships (Knobloch & Solomon, 1999). Because individuals rely on relational scripts and schemas to know what to do in relationships (Planalp, 1985), relational uncertainty is expected to increase when norms and rules for the relationship are unclear, particularly in points of transition. Although research generally suggests that uncertainty should decline as a relationship becomes more intimate (Berger & Calabrese, 1975), uncertainty may increase if couples are going through a transitional state, such as becoming more serious.

The current study sought to discover if online transitioning relationships differ in their relationship uncertainty perceptions than face-to-face relationships. As expected, the research discovered that partners in the online romantic relationships perceived less relationship uncertainty prior to the transition and higher relationship uncertainty after the transition than partners in face-to-face romantic relationships. Findings are consistent with previous research indicating people in mediated relationships who anticipate future face-to-face interactions actively work to reduce uncertainty (Pauley & Emmers-Sommer, 2007; Walther, 1994). Walther

and Zhang (2007) found that, in line with the hyperpersonal perspective, the transition offline of non-romantic virtual partners mitigated any gains in relational characteristics that the online partners made over face-to-face partners. Relating these findings to individuals online explain how the increased intimacy and reduced uncertainty prior to the shift diminished after partners transitioned. A reason for the increases in relationship uncertainty may be that individuals experience notions of their partner offline that are different from what was perceived online. This change in perception could account for the increase in relationship uncertainty after the transition.

With a change in perception seen in both relationships, results are somewhat consistent with the relationship turbulence model, particularly in face-to-face romantic relationships, which show that relationship uncertainty increases when partners find themselves in a period of transition between levels of involvement. Yet, individuals in online relationships generally experienced more turbulence overall; more turbulence can be seen in the greater changes of means between relationship uncertainty and intimacy as well as less expectations met and greater increases in turmoil and topic avoidance than individuals in face-to-face relationships. Although individuals in online romantic relationships did not experience as strong of association between relationship uncertainty and indicator variables than individuals in face-to-face relationships, the current results could suggest that individuals in online relationships may experience even more extreme levels of emotional, cognitive, and communicative reactions to events as they increase the seriousness of their relationship (Solomon & Knobloch, 2001, 2004).

*Relationship uncertainty and relational characteristics.* The relational turbulence model has linked increases in relational uncertainty with more topic avoidance with a partner (Afifi & Burgoon, 1998; Knobloch & Carpenter-Theune, 2004; Knobloch & Solomon, 2002) and more



indirect communication (Theiss & Solomon, 2006b). As such, this study predicted that relationship uncertainty would be associated with partner interference, indirect communication patterns, topic avoidance, and perceptions of increased turmoil in relationships. Relationship uncertainty was correlated with topic avoidance and turmoil in individuals in both the online and face-to-face groups. These findings coincide with the increase in relationship uncertainty after the transition and support the relationship turbulence model. Consistent with the model, increases in uncertainty corresponded to an array of emotional, cognitive, and communicative manifestations of turmoil in romantic relationships. The increase in relationship uncertainty after the transition was associated with increases in turmoil and topic avoidance and corroborates previous research on face-to-face relationships which demonstrated that uncertainty corresponds with increased topic avoidance (Afifi & Burgoon, 1998; Knobloch & Carpenter-Theune, 2004) and increased turmoil in the relationship (Knobloch, 2007). Other researchers have found that uncertainty may hinder communication (Babrow et al., 2000) or that it produces avoidance (Planalp & Honeycutt, 1985). According to Berger and Calabrese (1975), uncertainty may produce uneasiness, and as a consequence, individuals may seek to reduce uncertainty through communication. Whereas Berger and Calabrese (1975) were focused on initial interactions, the findings of this research suggest that uncertainty was associated with avoidance, rather than communication. That is, when individuals reported perceptions of relationship uncertainty, they also reported using topic avoidance with their partner. These findings are similar to other research (e.g., Knobloch & Solomon, 2005) that found uncertainty may hinder communication in established romantic relationships.

A possible explanation for the presence of an association between relationship uncertainty and topic avoidance in both groups as well as turmoil in the face-to-face group might

involve the nature of relationship uncertainty. To recap, relationship uncertainty emerges when people question the status and nature of their relationship (Knobloch & Solomon, 1999). The status of people's relationship may include the other partner's perceptions of the relationship, which are not known to the other partner. This creates a type of ambiguous uncertainty because a part of the perceptions that make up the uncertainty are a product of appraisal about one partner's perception of the other partner's uncertainty (Solomon & Knobloch, 1999, 2002). For example, people may question what rules or norms their partner perceives in the relationship. The ambiguity associated with relationship uncertainty may increase topic avoidance because of the lack of knowledge about their partner's feelings which may be compounded in online relationships that have not always had the benefit of nonverbal communication to help decipher messages.

Previous research has also found a positive association between uncertainty and avoidance (Knobloch & Carpenter-Theune, 2004). That is, the greater the degree of uncertainty that people experience, the more they try to avoid talking about the topic that increased their uncertainty. Babrow et al. (2000) similarly found that increased uncertainty may result in avoidance. Findings such as these may suggest that more ambiguous types of uncertainty, such as relationship and partner uncertainty where the perceptions of the partner are perceived and not know for certain, might lead to frequent avoidance. In summary, the current investigation lends support to the relationship turbulence model that relationship uncertainty is associated with topic avoidance and increased turmoil. Even more, this study extends the ideas of the relationship turbulence model that the association between increased relationship uncertainty, topic avoidance and turmoil can be seen in transitioning online romantic relationships.

Although uncertainty was associated with topic avoidance and turmoil in romantic online transitioning relationships, no associations were seen between relationship uncertainty, partner interference and indirect communication. No connections were indicated despite previous research on transitioning in-person romantic relationships have seen a connection between these relational characteristics (see Solomon & Knobloch, 2004; Theiss & Solomon, 2006). A possible reason why these associations do not apply to online transitioning relationships could be that using direct communication is a relational skill that partners have been using online to build their relationship. Previous research indicates people in online relationships tend to use more interactive strategies for communication because they involve direct communication (e.g., emailing or online chatting) with the relationship partner (Ramirez et al., 2002). Partners may have had to be more direct in their communication when online because of the lack of nonverbal interactions. Partners may have already developed direct communication patterns with one another so they may feel more comfortable communication directly with their partner than face-to-face transitioning relationships. Communicating more directly with a partner may be a positive outcome of initiating a romantic relationship online. Further research should investigate this pattern more in-depth to see if the direct communication patterns developed online transcend the transition.

Surprisingly, relationship uncertainty was not associated with partner interference in the online romantic relationship group yet positively correlated in the face-to-face relationship group. Although previous research on face-to-face relationships have found relationship uncertainty and partner interference to be highly, positively correlated (Solomon & Knobloch, 2004; Theiss et al., 2009), findings from the current study show that the associations may not apply to online romantic relationships. Since over 82% of participants in the online relationship

group lived within 25 miles of their partner and over 94% lived within 50 miles of their partner, the reasons for the interference cannot be explained by proximity. A possible reason for the current findings may be that once online partners move offline, they are not as involved in their partners' day-to-day lives as face-to-face partners. Face-to-face partners may have incorporated their casual dating partner into their day-to-day lives more than online partners incorporated their online relationship partner into their lives. It is much more difficult to include online partners into offline lives than face-to-face partners before taking the relationship offline. Once they do transition offline, online partners may be accustomed to more independence and may not allow themselves to become highly interdependent, or they may not perceive their new interdependence as interfering with their everyday lives as much as face-to-face partners.

Beyond comparing differences regarding partner interference, support was not found for the prediction that the association between relationship uncertainty and partner interference, indirect communication patterns, topic avoidance, and perceptions of increased turmoil would be moderated by relationship type such that the associations between relationship uncertainty and the characteristics would be stronger for individuals who have transitioned in an online romantic relationship than individuals who have transitioned in a face-to-face relationship. Findings from this prediction lead to the notion that relationship type, either online or face-to-face, may not affect the strength of the relationship between relationship uncertainty and relational characteristics. Even though minor differences were found in the associations between relationship uncertainty and certain relational characteristics when examining online and face-to-face relationships, a lack of moderating effect of relationship type may call into question how different online romantic relationships are from more traditional relationships. Even though differences have been seen, results from this study may emphasize that differences are not that

extensive and online and face-to-face relationships may not vary greatly in partners' perceptions of relational characteristics or their communication.

With results demonstrating little differences between groups, it is important to discuss the implication of these findings. Partner interference and indirect communication were not associated with increased relationship uncertainty in online relationships but were associated in face-to-face relationships in the current study and previous research. The study proposed possible explanations for the differences between relationship types. However, consistent with the model, topic avoidance and turmoil were associated with increased relationship uncertainty in both online and face-to-face relationships. The model can then be extended to include these indicators in online relationships.

Additionally, the study explored how partners reported relationship uncertainty and intimacy levels altered through the transition process. Results indicated that relational uncertainty and intimacy did fluctuate during transitions in online and offline relationships. The study also diverged from previous tests of the relational turbulence model because it tested two different types of relationships simultaneously. Past studies have only tested one type of relationship at a time and have to this point never compared two different types of relationships in the model. Because participants were from two different relationship types, the study was able to explore how intimacy and relationship uncertainty might be related to relational characteristics from relationships formed in different ways.

#### *Potential Mediators of the Relationship between Relationship Type and Uncertainty*

*Deception.* Investigating the role of deception in transitioning romantic relationships is important, especially given the well-documented association between deception and negative consequences to relationships (McCornack & Levine, 1990; Planalp & Honeycutt, 1985; Planalp,

Rutherford, & Honeycutt, 1988). Further, online research has shown people oftentimes deceive in online dating (Epstein, 2007; Gibbs, Ellison, & Heino, 2006; Whitty, 2008; Whitty & Carr, 2006) where deception may be easier to conceal because of the limited verbal and nonverbal cues. Although the use of deception online to establish a relationship is common, less is known about how deception affects transitioning relationships. The current research hoped to shed new light on how relationship type is affected by deception in initiating romantic relationships as well as to better understand differences between groups in terms of relationship uncertainty differences after the transition.

Degree of deception (i.e., a combination of amount and severity of deception) reported in online relationships was less than the deception in face-to-face relationships. These findings went against previous research that online romantic relationships are rampant with deception (Epstein, 2007; Gibbs, Ellison, & Heino, 2006; Whitty, 2008; Whitty & Carr, 2006). Since the current study found online romantic relationships that successfully transfer to offline relationships perceive less deception than face-to-face relationships, it is important to note that deception occurs regardless of the choice of medium even though the means were low and very few participants in both groups noted deception occurred. In fact, out of all the participants in both groups, only 22 online participants and 34 offline participants experienced deception in their relationship. The relatively small amount of participants experiencing deception limited the power of the analysis but also highlighted that not all online-initiated relationships are rife with deception. The deception findings corroborate previous relational research which states that people want their romantic partners to understand them and accept them for who they are (Reis & Shaver, 1988) and that people are more likely to express their “true self” online (Bargh, McKenna, & Fitzsimons, 2002; McKenna & Bargh, 2000). By not deceiving, individuals who

form relationships online are more likely to have a romantic partner who is accepting of their real selves.

The current study also examined if the degree of deception was associated with relationship uncertainty. Although the online group reported less deception than the offline group, the degree of deception was positively associated with relationship uncertainty before and after the transition for the online group but there was no such association for the offline group. The findings from the online group correspond with previous research that the detection of deception during a transitional state has been shown to increase uncertainty (Planalp & Honeycutt, 1985; Planalp et al., 1988). Differences between the online and face-to-face groups may be explained by the larger level of relationship uncertainty seen in the online group. The higher level of relationship uncertainty in this group was expected because most online individuals indicated that the move offline was a transition point in their relationship. The relational turbulence model has shown couples that are in transition experience higher uncertainty (Solomon & Knobloch, 2001, 2004). But, unlike the face-to-face group, the online group in particular was expected to perceive higher relationship uncertainty because in this transition partners will need to navigate new communication patterns via new channels as well as establish new norms in the relationship. All of these changes are likely to increase uncertainty, as seen in the results. On top of the new changes to relational patterns, the discovery of any type of deception is likely to be linked with greater relationship uncertainty as the couple reestablishes its relationship and experiences the transition. It is important to note that another possible explanation for the findings may be that only 56 participants reported experiencing deception in their relationship. While the relatively low number of participants reporting deception did limit the power of the analysis, it also brings up questions as to why so few participants indicated

deception. Other issues may have influenced participants' reports of deception, such as the phrasing of the questions on the survey, participants' unwillingness to report deception in a relationship they are currently in, and the open-ended definition of deception. Or, it may be that deception is in fact less rampant in relationships that are initiated online than we believe. Future research should study whether the findings on the relative lack of deception is seen in further investigations.

Overall, the current findings offer certain insights regarding deception in online relationships. Since the discovery of deception did not dissolve the relationships and most of the deception in both relationship types were not severe, it is important to posit that deception need not be overtly intentional or malicious. In fact, the severity of deception perceived was higher in the face-to-face group than the online group. The less severe deception might represent the desire for relationship continuation, enjoyment of online interactions, an attempt to decrease personal insecurities, and yearning for increased intimacy (Whitty & Gavin, 2001). When deception does occur in online transitioning relationships, it is possible that in part due to lack of nonverbal cues and hyperpersonal influences in online interaction (Walther, 1992, 1996), inadvertent deceptions might occur based on genuine desires to develop familiarity and intimacy before meeting in-person. It could be difficult for some people to adequately share, convey, and interpret relational information online (Henderson & Gilding, 2004; Sherman et al., 2001; Weisband & Atwater, 1999). There is also the possibility that there could be some types of information people might be hesitant to share online, such as psychological issues, past relationship history, or financial problems. People might be unaware that concealing this information may be problematic to the relationship and be viewed by the other partner as deceptive. There is another possibility that some people prefer to conceal or omit potentially disturbing information during online



interactions rather than provide false information. That is, it might be more difficult to keep track of details that may not be accurate than it is to remember what details were fabricated, disclosed or concealed, especially since the instructions of the current study did not define deception and that participants likely self-defined it as an overt act.

Another insight the current study found revolves around the discovery of deception in some of the online relationships. Since deception was discovered in some of the online relationships it raises questions regarding how and when to share sensitive or potentially disruptive personal information online and the range of appropriate responses to various types of information particularly when these relationships are at a point of transition. Desires for intimacy, meeting face-to-face and continuing the relationship, insecurities, and fears of rejection might prohibit some people from conveying or knowing when and how to convey certain types of information. These same motivations could also hinder a partner's ability to evaluate information once it has been disclosed. However, awareness of values, personality, character, and conflict resolution styles might necessitate face-to-face interaction over time and in a variety of situations.

Overall, the results on deception highlight issues individuals face when they experience a transition in their relationship. Relationships with little perceived deception appear to be better able to transmute mediums in order to continue the relationship. Also, the relative diminutive amount of deception found in the study points to a possible reason why these relationships successfully navigated the transition. The lack, or rather small amount, of perceived deception might have been an important factor in keeping the relationship together through the transition. If more deception had been discovered, the relationships may not have continued. Future research may examine relationship qualities between online couples who stayed together after

transitioning offline and couples who terminated post transition as well as how the nature of deception and deception detection might vary between online and offline relationships.

*Expectations.* This dissertation previously discussed how the introduction of visual and nonverbal cues inherent to face-to-face interaction is more likely to provide information incongruent with expectations (Jacobson, 1999) if the individuals remain online for a long period of time prior to a transition. More specifically, the longer individuals stay online the greater the likelihood they have idealized notions or expectations of their partner that may not live up to expectations once the relationship is offline. Findings indicated that individuals in online relationships perceived less met expectations than in individuals in face-to-face relationships. The online setting may foster more idealized notions and expectations of the relationship, and individuals in online relationships may realize their expectations have not been met once they transition to a new stage of the relationship such as transitioning offline. As previous research has shown, the longer partners limit their interactions to online communication, the greater the likelihood the impressions and expectations will be idealized (Ramirez & Zhang, 2007; Walther et al., 2001). Even long-distance relationship research has found that without occasional face-to-face contact, individuals tend to start idealizing their partners (Gunn & Gunn, 2000). In the current research, the longer couples were online before moving offline, the more likely they were to have unmet expectations,  $r(193) = .41, p = .02$ . Thus, the findings of the current study and previous research indicate that online partners may have more idealized notions of their partner before transitioning and, therefore, increase the possibility that expectations will not be met once partners have a more mutually-committed relationship.

The findings regarding more idealized notions in the online group coincides with social identity/deindividuation theory (SIDE). As previously noted, SIDE has been applied to explain

interaction in computer-mediated groups (Lea & Spears, 1995). SIDE theory predicts that CMC users over-interpret information, find similarity and common norms, and tend to perceive a greater attraction to others online. When these online relationships move offline, the unrealistic, positive impressions formed online may not coincide with impression offline. The inconsistency in impressions may also be compounded by the notion that *eHarmony* told both partners they were a match, possibly increasing individuals' expectations of their partner. Once partners meet face-to-face the unrealistic expectations from communicating online and the expectations of being a match according to *eHarmony* may not live up to the high impressions formed online. This may be a reason why individuals in the online group perceived less met expectations after the transition and increased uncertainty.

Met expectations was also negatively correlated with relationship uncertainty in the face-to-face group but not the online romantic relationship group. A possible explanation for this negative association in only the face-to-face group may be that online relationships anticipate their expectations will not be fulfilled by their online partner. With a stigma still attached to online relationships (Anderson, 2005; Wildermuth, 2004), online daters could feel unmet expectations are a byproduct of online dating. Online daters could prepare themselves more for unmet expectations than face-to-face daters because of the stigma attached to online dating, and the Internet in general, that people are more likely to lie online than in-person. Relationship uncertainty may then be associated with unmet expectations in face-to-face relationships because in-person partners were not as prepared for unmet expectations as online daters. The non-association between uncertainty and unmet expectations in the online group may be a positive outcome to the stigma associated with online dating. Online daters, then, may not allow issues such as unmet expectations to negatively affect uncertainty as much as face-to-face relationships.

Future research should investigate the type of expectations not met when transitioning in both online and offline relationships and how those unmet expectations were created.

Deception and met expectations were proposed as mediators of the relationship between relationship uncertainty and relationship type. Yet, neither served as a significant mediator. For deception, a possible explanation for the findings may lie in the lack of differences between the two groups. A relatively small amount of deception was found in the study and there was a very small amount of difference between online and offline relationships. With the strong association found between relationship uncertainty and relationship type and lack of deception in the study, it is not surprising that mediation did not occur. For met expectations, a mediation effect did not occur despite an association between relationship type and met expectations as well as met expectations and relationship uncertainty. Individuals in online transitioning relationships did have significantly less met expectations and significantly more relationship uncertainty than their face-to-face counterparts. However, differences in relationship uncertainty were not explained by met expectations. A possible explanation for the differences may be that individuals in online transitioning relationships experience perceptions of their partner offline that are different from what was perceived online. Put another way, because the met expectations measure primarily focused on the partner's behaviors, online participants' greater uncertainty after the transition might be due to differences in other aspects of the partner or the relationship (e.g., partner's personality, relational dynamics, sexual intimacy). This change in perception could account for the increase in relationship uncertainty after the transition and also help corroborate previous findings from the current study that individuals in online transitioning relationships may experience more extreme levels of emotional, cognitive, and communicative reactions to events as they increase the seriousness of their relationship.

### *General Implications*

Throughout this chapter, specific implications of this study have been discussed; however, several general implications for the relational turbulence model, online relationships, and computer-mediated communication can be drawn from this research. This dissertation adds to the body of work showing that relational turbulence helps explain why people were more reactive to relational events. Recent research on the relational turbulence model has expanded the scope of the theory to include other transitions in relationships, such as the diagnosis of breast cancer or experiences of infertility (Solomon, Weber, & Steuber, 2010). This dissertation gives further support for the expansion of the scope of conditions of the relational turbulence model to include couples who transition in different relational contexts. Specifically, findings from this research support that the relationship turbulence model can be extended to online romantic relationships that are in a state of transition. If couples in online romantic relationship view the transition offline as a turning point in their relationship, they may perceive similar trends seen in the model. Specifically, they may experience a decrease in intimacy and increase in relationship uncertainty throughout the transition. The change in intimacy and relationship uncertainty perceptions may be more extreme in online relationships than more traditional relationships experiences; however, the pattern is consistent with the model. Further, the current study indicates that transitioning online relationships may experience topic avoidance and turmoil as their relationship uncertainty increases; yet, contrary to previous studies, they may not experience indirect communication or partner interference as a result of uncertainty. Future research should examine if these trends are consistent with online transitioning relationships that are initiated on other dating sites and if the model can be applied to other online relationships.

Dating literature acknowledges that dating is a changing concept within a society that is impacted by social constraints and expectations (Ingoldsby, 2003). The advent of online dating represents a current change in the nature of dating. The foundation of online dating typically makes a transition from an online to offline relationship a necessity in order to create a long-term, fulfilling relationship. As history has shown many times in the past, the introduction of new technologies may bring skepticism and raise concerns among people, especially those who have limited understanding or limited experience with the new technology (Berger & Smith, 1999). Indeed, the development of personal relationships on the Internet has been viewed with distrust and suspicion, and therefore, relationships emerging on the Internet have definitely been questioned or looked at with suspicion and doubt. As Bonebrake (2002) wrote, “individuals who meet new people online have often been viewed as abnormal for using unconventional means to meet others” (p. 552). As evidenced in this study, theories typically used to help explain more traditional relationships may help to explain online relationships as well. More theories that have in the past been tested on more traditional romantic relationships should also be tested on online romantic relationships to better understand similarities and differences between the relationship types.

Finally, research on computer mediated communication benefits from the findings. Researchers can take away information about how online romantic partners successfully maintain and intensify their relationship while navigating offline. In order to be a fulfilling, successful long-term relationship, online partners eventually need to navigate their relationship into an offline setting. The current study helps shed light on the characteristics in online relationships that navigate the transition successfully, such as low deception rates and higher intimacy and relationship uncertainty before a transition. Researchers can use those

characteristics to help build dating sites that allow the characteristics to flourish and aid couples in building lasting relationships that can transition mediums. Practically, findings might also assist people who become involved in online romantic relationships by helping them clarify their feelings about others they meet online, identify deception in the beginning of a potential relationship, and recover more quickly from betrayals.

### *Strengths, Limitations and Future Directions*

As noted throughout the chapter, this dissertation makes several important contributions to the study of online romantic relationships, but there are also limitations that should be taken into account. In this section, several strengths and limitations are identified as well as suggestions for future research. To begin, a description of the strengths of the study is discussed. Then, limitations and directions of future research are reviewed.

The purpose of this study was to understand and describe how individuals in romantic relationships initiated and maintained online report their experiences of transitioning offline and how their reports compare to more traditional, offline relationships. This study is one of the first to examine online dating relationships moving offline and, in particular, assessing processes both prior to and after the transition as well as how participants view the transition in regards to the status of their relationship. In addition to examining the processes of online relationships moving offline, this study also accessed differences between online and offline romantic relationships and attempted to explain why differences are occurring between these two types of relationships.

More specifically, one strength of the study is that the participant pool has been limited in order to gain a more in-depth understanding of a small section of online relationships. Particularly, this study only focused on relationships initiated on *eHarmony.com* and were exclusively online for at least two months prior to transitioning offline. Although these restraints

on participants limit the generalizability of the findings, it allowed more in-depth analysis of this particular group of online daters. The restraints on the participant pool, however, also help expand our understanding of the relational turbulence model. To date, much of the research on relational turbulence theory have been tested on convenience samples mainly consisting of college aged undergraduates; by contrast, the sample for this dissertation included adults older than the average undergraduate sample that may better reflect the broader reality of romantic relationships.

Although the proposed dissertation has several strengths, it is important to note some of the limitations. First, only one individual from a relationship participated in the study. Perceptions from both partners in a relationship were not collected and examined. The other partner in the relationship may have differing perceptions of the relationship that may give a more comprehensive view of relationship dynamics. When data from both partners in a relationship are collected, researchers may be better able to study the relationship as a whole and from each partner's perspective in order to have an all-inclusive examination. Future research should consider collecting data from both participants in the relationship in order to better understand perceptions between partners as opposed to individual perceptions.

Another limitation that should be noted is that in the online relationship group individuals were told they were a match to their partner on *eHarmony*. The concept of an Internet site indicating to its users that the people "matched" with them have demographics, qualities and personalities that match their desired characteristics of a romantic partner may influence perceptions of the relationship and partner. Individuals may perceive more positive feelings toward their relationship and partner because *eHarmony* indicated they were a match or individuals may feel confused or disheartened if they start to perceive feelings that their partner



is not a match. Although accounting for the influence of *eHarmony* indicating partners are a romantic match was not in the scope of this dissertation and therefore a limitation of the current study, future research should take this limitation into consideration.

Next, the online sample was limited in several ways to maintain consistency within the group. Particularly, only individuals who had initiated their relationship on *eHarmony.com* and were exclusively online for at least two months prior to moving offline were included in the analysis. As a result of these limitations, the findings from the study may not be generalizable to online relationships initiated on other dating sites or for relationship that were online for less time prior to moving offline. Additionally, for both the online and offline groups, a time frame for individuals to transition from a casual to serious relationship within the past two years was imposed in order to solicit more recently developed relationships. The time frame may make findings less generalizable to individuals who did not make their transition within the time frame.

In addition to the time frame imposed in the study, the fact that couples did successfully navigate the transition and were still together at the time of data collection is important to consider because it may have influenced participants' responses. Participants may have reported results that were more favorable to their partner and relationship than they actually perceive because they are still in the relationship and do not want to indicate unfavorability or negativity about a relationship they are currently in. Indicating negative perceptions may bring up feelings of cognitive dissonance that may be rectified by reporting more favorable perceptions of their relationship.

It is also important to note that this study only investigated individuals who successfully made the transition from online to offline relationships. The reason for only examining these

types of relationships was because the intention of this dissertation was to explore the relational turbulence model in online transitioning relationships. Couples needed to be together throughout the transitional process in order to apply the principles of the model. Therefore, individuals whose relationships were terminated during the transitional process were not included and limit the findings to couples who successfully navigate the transition.

Finally, insights from this study might be limited by participants' memories and self-selected perceptions. From the context of guidelines of the study, participants had to recall perceptions that were less than two years old. Although this guideline was put into place to minimize recall loss, participants could have forgotten salient details related to their experiences or selected details that presented them more positively. Additionally, their current perceptions of the relationship may also have shaped their reports of earlier events. For instance, if their current perceptions are more positive, they may not remember or report more negative perceptions from the past. Further tests may consider using longitudinal methods in order to gain current perceptions over time that are not potentially skewed by recall loss or self-selected perceptions.

#### *Recommendations for Further Study*

*Online and Face-to-Face Relationships.* Some investigators have asserted that although there are probably differences in romantic relationships initiated online versus more traditional environments, they are likely more similar than different in terms of challenges and benefits (Cornwell & Lundgren, 2001; Heino et al., 2005; Lawson & Leck, 2006; Spitzberg, 2006). Few investigations have explored similarities and differences between relationships initiated and developed online and those developed in offline or traditional environments (Cornwell & Lundgren, 2001; Wright, 2004). Due to the relative newness of using the Internet for relationship development, we do not yet know if relationships initiated online are more or less successful, in

the long-term, than those initiated in traditional environments. Longitudinal studies with participants in both types of relationships, through interviews and surveys at periodic time intervals would provide additional information regarding how successful people are in times of relational transition and what characteristics contribute to relationship continuation, perceived success, and termination.

Further, people can feel intimacy, uncertainty, have unmet expectations, and fall in love no matter the environment. To blame the online environment for these negative experiences, however, might be premature, as it is equally possible that a couple who initially meet through more traditional (i.e., in-person) means could face nearly identical conflicts. People can be both intentionally and inadvertently deceptive in either online or face-to-face environments. However, the online environment might favor deception in some cases, due to relative reliance on the written word to state that one possesses certain characteristics and values. Demonstrating characteristics and values, however, might demand in-person interaction across time and in a variety of situations. In-person interaction allows people to more accurately assess mannerisms, responses to common stressors (e.g., work problems, traffic), and how partners interact in different social situations, for example. Reading that a prospective online partner states having certain characteristics and values is possibly quite different, in some cases, from observing how these purported characteristics and values are demonstrated in everyday interactions. Future research should examine how character and values indicated online are perceived when relationships move offline.

*Relational Turbulence Model.* The relational turbulence model originally focused on explaining why people were more reactive to relational events at moderate levels of intimacy. Recent research, however, has expanded the scope of the theory to include other transitions in

relationships (Solomon, Weber, & Steuber, 2010). This dissertation gives support for online transitioning relationships that were initiated on a dating website to be included in the model in addition to relationships that were initiated in-person. Future research should examine if other types of relationships that were initiated online follow the model's conditions as well as if other aspects of the model not explored in this study can be seen in virtual partners. Possible other types of website to further examine online relationships include gaming, social networking, virtual reality, and blogs. Additionally, each online dating website has unique characteristics that allow users to find potential partners. Further studies may examine if the characteristics of the model can be applied to other dating websites beyond *eHarmony* and if those characteristics are evident in both partners in the relationship.

*Time.* Time and its importance to online relationship development have been noted by investigators (Albright & Conran, 2003; Henderson & Gilding, 2004; Tidwell & Walther, 2002; Walther, 1992, 1996; Whitty, 2002; Whitty & Gavin, 2001). Further studies might investigate the relationship between time spent in online communication or courtship and reported hyperpersonal interaction or idealization of others (Albright & Conran; Henderson & Gilding, 2004; Jacobson, 1999). Although perhaps difficult to investigate, it would be worthwhile to explore differences of those in both successful and unsuccessful former online relationships that transitioned their relationships offline soon after meeting online or engaged in more extended courtships online.

## Summary

Framed by the relational turbulence model, this study explored intimacy, relationship uncertainty and interaction variables in romantic relationships experiencing transitions. Specifically, how these variables interact when online romantic relationships transition to a more

serious relationship (which was the transition offline for the majority of participants) was of particular interest. It is one of the first studies to apply the relationship turbulence model to online romantic relationships. Predictions regarding relationship development, deception, and expectations were explored. In addition, this study contributed to the literature on online romantic relationships by both confirming previous findings and uncovering areas for future investigation.

In summary, previous findings suggest that the Internet is a relatively new alternative to meeting potential romantic partners through more traditional means such as friend and family referrals, professional associations, chance encounters, and nightclubs. It is possible that for some people, these venues are being partially replaced by online opportunities. Participants discussed involvement in successful romantic relationships (at least at the point of participation) that were initiated online. It is possible that the Internet has emerged as merely an alternative meeting place. This study does not suggest that online relationships involve the exact dynamics as relationships initiated in-person; however, findings are in relative agreement with previous research (Anderson & Emmers-Sommer, 2006; Heino et al., 2006; Lawson & Leck, 2006; Spitzberg, 2006) that has suggested similar problems and opportunities in romantic relationships exist whether initiated online or in traditional environments. Ultimately, for those whose goals include a long-term, face-to-face romantic relationship, the Internet offers many opportunities for initiating and developing relationships (Dawson & McIntosh, 2006). However, although it is probable that some relationships could be maintained online indefinitely, those who seek face-to-face romance likely find the online environment ultimately limiting and it necessary to meet potential partners face-to-face.

## APPENDIX A

### IRB consent form

IRB approved on: 1/13/2011

Expires on: 1/12/2014

IRB: 2010-12-0052

You are invited to participate in a survey, entitled “An exploration of transitions in romantic relationships.” The study is being conducted by:

Kimberly Schaefer, M.A., Department of Communication Studies, of The University of Texas at Austin, 1 University Station A1105 Austin, TX 78712-0115, 512- 471-7043 (office),  
kschaefer@mail.utexas.edu; and

Rene Dailey, Ph.D., Department of Communication Studies, of The University of Texas at Austin, 1 University Station A1105 Austin, TX 78712-0115, 512-471-4867 (office), e-mail  
rdailey@mail.utexas.edu

The purpose of this study is to examine relational perceptions surrounding times of transitions in romantic relationships. Your participation in the survey will contribute to a better understanding of how relationships transition from a casual to serious relationship. We estimate that it will take about 45 minutes of your time to complete the questionnaire. You are free to contact the investigator at the above address and phone number to discuss the survey. Risks to participants involve the possibility that reflecting on, and possibly existentially reliving, potentially disturbing romantic relationship experiences that may bring up existential issues. The benefits include a contribution to the body of literature in the field, as well as the possibility of a more integrated personal understanding of the experience of dating and the challenges and rewards that it offers. There will be no costs for participating and any identification information collected

will be kept confidential and deleted at the end of data analysis. Only a limited number of team researchers will have access to the data.

Your participation in this survey is completely voluntary. You may decline to answer any question and you have the right to withdraw from participation at any time without penalty. If you wish to withdraw from the study or have any questions, contact the investigator listed above. If you have any questions or would like us to email another person for your institution or update your email address, please call Kimberly Schaefer at 512- 471-7043 or send an email to [kschaefer@mail.utexas.edu](mailto:kschaefer@mail.utexas.edu). You may also request a hard copy of the survey from the contact information above.

To complete the survey, click on the link below:

[[HTTP://LINK TO SURVEY URL](#)]

This study has been reviewed and approved by The University of Texas at Austin Institutional Review Board. If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - the Institutional Review Board by phone at (512) 471-8871 or email at [orosc@uts.cc.utexas.edu](mailto:orosc@uts.cc.utexas.edu).

**Your participation in this study indicates your consent to take part in this study.**

If you agree to participate please click on the link to the survey above.

Thank you.

## APPENDIX B

### Intimacy measure (Rubin's 1970 Love Scale)

Directions: Participants were asked to respond to each statement on a 6-point Likert scale where 1 = not at all true and 6 = definitely true.

1. You would have done anything for your partner.
2. If you were lonely, your first thought was to seek your partner out.
3. One of your primary concerns was your partner's welfare.
4. You felt responsible for your partner's well-being.
5. You felt you could confide in your partner about virtually anything.
6. If you couldn't talk with your partner, you felt miserable.
7. You would have forgiven your partner for practically anything.
8. You would have enjoyed being confided in by your partner.
9. It would have been hard for you to get along without your partner.



## APPENDIX C

### Relationship uncertainty measure (Knobloch & Solomon, 1999)

Directions: Participants were asked to respond to how certain they were about each statement on a 6-point Likert scale where 1 = completely uncertain and 6 = completely certain.

1. You thought the relationship would work out in the long run.
2. You and your partner felt the same way about each other.
3. You thought you and your partner would stay together.
4. The relationship was a romantic one.
5. You knew the boundaries of appropriate behavior in the relationship.
6. Your partner liked you as much as you liked him/her.
7. This was a romantic relationship.
8. You knew how you could behave around your partner.

## APPENDIX D

### Partner interference measure (Solomon & Knobloch, 2001)

Directions: Participants were asked to respond to each statement on a 6-point Likert scale where 1 = strongly disagree and 6 = strongly agree.

My partner interferes with the plans I make.

1. My partner interferes with my plans to attend social events.
2. My partner interferes with the amount of time I spend with my friends and family.
3. My partner interferes with how much time I devote to my work.
4. My partner interferes with the things I need to do each day.

## APPENDIX E

### Directness of communication measure (Theiss & Solomon, 2006)

Directions: Participants were asked to respond to each statement on a 6-point Likert scale where 1 = strongly disagree and 6 = strongly agree. Items were reverse coded so that higher values represent perceptions of more indirect communication.

1. You explicitly told your partner about behaviors that irritated you.
2. You had a direct conversation with your partner about your irritations.
3. You openly told your partner when you felt jealous.
4. When you felt jealous you told your partner how you were feeling.

## APPENDIX F

### Topic avoidance measure (Theiss & Solomon, 2006)

Directions: Participants were asked to indicate the extent to which they avoided each topic with their romantic partner by responding to each statement on a 6-point Likert scale where 1 = never avoided and 6 = always avoided.

1. Negative life experiences
2. Past dating experiences
3. Friendships
4. Current relationship concerns
5. Sexual experiences
6. Financial issues
7. Politics

## APPENDIX G

### Turmoil measure (Knobloch, 2007)

Directions: Participants were asked to respond to each statement on a 6-point Likert scale where 1 = strongly disagree and 6 = strongly agree.

“A little time after transitioning, my relationship was . . .”

1. turbulent.
2. chaotic.
3. in turmoil.
4. tumultuous
5. hectic
6. frenzied
7. overwhelming
8. stressful

## APPENDIX H

### Met expectations measure (Stafford & Canary, 1991)

Directions: Participants were asked to think about expectations and indicated the extent to which they agreed with the following statements respond to each statement on a 6-point Likert scale where 1 = strongly disagree and 6 = strongly agree.

Your partner met your expectations for...

1. making interactions pleasant.
2. sharing open communication with you.
3. being a supportive partner.
4. completing tasks in the relationship.
5. finding time to spend with you.
6. NOT avoiding issues we needed to discuss.
7. having positive social behaviors.
8. having a sense of humor you enjoy.
9. being physically attracted to them.

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